



## OPEN The interplay among environmental sensitivity, job stressors, and leadership styles on employee well-being

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Investigating the role of individual differences in Environmental Sensitivity for well-being and stress at work is an emerging area of research with significant potential for practical implications in organizational management and human resources. Recent studies have begun to explore how individuals with high sensory-processing sensitivity (SPS) may be more vulnerable to work-related stress than their less sensitive peers, but may also derive greater benefits from positive job resources when available. The present study aims to investigate the role of leadership style in the complex interplay between individual differences in sensitivity, stress at work, and general well-being. A questionnaire was administered through Qualtrics to a total of 317 workers from two medium–large-sized Italian companies, across two waves between May and July 2022. Findings provided support for a three-way interaction effect, with job stressors exerting an adverse effect on participants' well-being, mitigated by democratic and let-it-be leadership styles at the team level, particularly among highly sensitive individuals. Thus, our findings suggest a vantage sensitivity effect and underscore the importance of cultivating positive work climates to enhance workers' ability to cope with stressors and improve their global well-being, with particular relevance for highly sensitive individuals.

**Keywords** Environmental sensitivity, Leadership styles, Job stressors, Well-being, Organizational management

Environmental sensitivity is a well-established and researched construct in psychology, pertaining to individual differences in susceptibility and responsiveness to environmental stimuli<sup>1,2</sup>. It captures individual variability in response to negative and positive experiences, with a significant minority of individuals, around 25 to 30%, being highly sensitive to stimuli as reported across multiple studies<sup>3,4</sup>. Empirical evidence showed that Environmental Sensitivity is partially heritable<sup>5</sup>, has specific genetic correlates<sup>6</sup>, and from a phenotypic point of view is captured by the trait of Sensory Processing Sensitivity (SPS)<sup>7,8</sup>. SPS, referring to the extent to which individuals perceive and process stimuli, and to their emotional reactions to these, has been repeatedly shown to be an accurate marker of increased sensitivity to the environment<sup>8</sup>. In adults, it can be relatively easily assessed at a phenotypic level also with self-report questionnaires, such as the Highly Sensitive Person Scale<sup>8,9</sup>. Importantly, multiple pieces of evidence showed that Environmental Sensitivity, as captured by the SPS trait, does not fully overlap with other existent and traditionally considered personality traits and temperamental variables, though correlations have been found with both Neuroticism and Openness<sup>10–12</sup>. Also, it predicts social and emotional aspects as interpersonal sensitivity over and above the Big Five personality traits<sup>13</sup>. Individuals with increased sensitivity to stimuli tend to have a higher reactivity and responsivity, meaning that if the environment is negative they tend to suffer more, report more often internalizing symptoms, and have less positive development, as shown both in adult and child samples<sup>14,15</sup>. But, importantly, if the environment is positive they flourish and benefit from available resources to a greater extent than low-sensitive individuals, suggesting an advantage effect<sup>16,17</sup>. For example, according to intervention studies, highly sensitive individuals are more likely to benefit from psychological support programs than low-sensitive individuals<sup>18,19</sup>, and based on laboratory evidence they exceptionally benefit from contact with nature and positive family environments<sup>20,21</sup> and show more positive

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emotions when confronted with positive-eliciting emotional stimuli<sup>3</sup>. Hence, they are more susceptible to stimuli, for better and for worse, in line with a differential susceptibility effect<sup>22</sup>.

Taking into account such individual differences in relation to environmental stimuli is likely to have an important theoretical and applied impact across a variety of fields in the psychological discipline, for a better understanding of the individual-environment interplay and for promoting and supporting individuals' psychological well-being. Yet, only recently, the concept of sensitivity emerged as a promising factor in organizational research focused on workplace well-being<sup>23,24</sup>. Indeed, recent studies have started to examine how highly sensitive individuals, who are most affected by both environmental stressors and incentives, may experience significantly different outcomes in the workplace compared to those who are not as sensitive, highlighting how highly sensitive individuals as captured by SPS may experience more work-related stress<sup>23</sup> but also enhanced responsiveness to job resources (e.g., supervisor support, job autonomy), and higher levels of well-being when those resources were available compared to their less sensitive counterparts<sup>24</sup>.

To further explore which factors affect the most highly sensitive people, we have focused our attention on another pivotal construct of organizational psychology: leadership. Extant literature has consistently found that leadership styles can influence a wide range of work outcomes, such as job satisfaction<sup>25</sup>, work engagement<sup>26</sup>, and psychological well-being<sup>27</sup>. Indeed, numerous studies have reported that leadership styles based on control are associated with poor job well-being and psychological health among employees<sup>27–29</sup>, revealing that autocratic and self-centered leadership styles are connected to adverse employee mental health, vitality, and increased behavioral stress<sup>28</sup>, higher levels of job strain and lower levels of job satisfaction<sup>30</sup>. Let-it-be leadership has been associated with employee psychological distress and elevated levels of burnout; however, the relationship varies depending on the organization's structure and personnel's skills<sup>31</sup>. Indeed, the impact of let-it-be leadership on stress was revealed to be mediated by specific workplace stressors, such as exposure to workplace bullying.

On the other hand, participative management styles have been shown to be associated with higher levels of job satisfaction, affective commitment, and employee engagement<sup>25,32</sup>. However, the majority of literature examining the relationship between leadership and well-being has primarily focused on *transformational* and *transactional* leadership styles<sup>28,33</sup>, as defined by Bass in 1985<sup>34</sup>, and has taken into account aspects of well-being that are strictly related to the work context, such as job satisfaction<sup>32,33,35</sup>. Thus, the relationship between autocratic, democratic, and let-it-be leadership and employees' general well-being remains understudied in recent literature, as these leadership styles have mostly been explored in terms of their impact on job performance<sup>36,37</sup>.

## Overview of the current study

Our study aims to address the aforementioned research gaps by examining the interplay among environmental sensitivity as captured by Sensory Processing Sensitivity, job stressors, leadership styles, and general well-being. Specifically, we aim to investigate whether highly sensitive individuals respond differently to job stressors compared to less sensitive individuals and whether various leadership styles can either alleviate or exacerbate the adverse effects of job stressors on levels of well-being, particularly among highly sensitive individuals.

Building upon the extant literature on job stress (e.g.,<sup>23</sup>), leadership styles (e.g.,<sup>25,27,28,31</sup>), and sensitivity (e.g.,<sup>15,16</sup>), this study aimed to investigate whether environmental sensitivity interacts with job stressors and leadership styles in predicting well-being. Specifically, in line with the dark side of sensitivity, we hypothesized that more job stressors and less supportive leadership styles (i.e., less democratic, more autocratic, less *laissez-faire*), alone or interactively, would predict lower well-being for individuals with higher sensitivity. In this context, we posited that not only would more stressors decrease well-being in highly sensitive individuals to a greater extent than in less sensitive ones, but this effect would be further exacerbated by less supportive leadership styles. Conversely, a positive leadership style might buffer against job stressors, mitigating their negative impact on well-being for highly sensitive individuals.

Following the bright side of sensitivity, we hypothesized that for highly sensitive individuals, lower job stressors and more positive leadership styles (i.e., more democratic, more *laissez-faire*, less autocratic), alone or interactively, would predict higher well-being. Thus, lower job stressors would improve well-being in highly sensitive individuals, and this positive effect would be amplified when combined with a positive leadership style. Additionally, we hypothesized that low-sensitive individuals would be resilient to adversities (i.e., more job stressors and less supportive leadership) and would not particularly benefit from better job conditions.

To investigate this matter, we administered a comprehensive questionnaire to a sample of 404 individuals, which included measures to assess individual sensitivity, preferred and perceived leadership styles, job stressors, and subjective well-being. In the context of this study, we specifically focused on the leadership style at the team level, pertaining to the leadership expressed by the immediate supervisor(s) or manager(s), rather than the leadership style of the overall organization. This distinction builds upon the framework initially defined by Zaccaro, Rittman, and Marks<sup>38</sup> and subsequently adopted by van Knippenberg<sup>39</sup>.

## Materials and methods

### Design, participants, and procedures

Participants were recruited in collaboration with an HR consulting company specializing in the Assessment, Empowerment, and Well-being of Human Resources in Italy. Questionnaires were administered between May and July 2022 and involved two medium-large-sized Italian companies that also had offices abroad.

Participants were directed to our questionnaire by clicking on a provided link, which was hosted through Qualtrics. Prior to participation, participants were provided with information regarding data storage and processing procedures, ensuring compliance with Regulation (EU) 2016/679 GDPR. The study adhered to the ethical standards outlined in the 1964 Declaration of Helsinki, and participants were explicitly informed of their right to refuse participation or to withdraw their consent at any time without facing any negative consequences or reprisals. After being provided with all the above information, participants explicitly declared their informed

consent to participation by selecting the relevant opt-in option before beginning to fill out the survey. Research involving the use of non-sensitive, completely anonymous educational tests and surveys when the participants are not defined as “vulnerable” and participation will not induce undue psychological stress or anxiety and study of clinical details. In addition, the study is purely observational (non-invasive and non-interactive) unless the recorded observations identify individuals (names, photographs) which could place them at risk of harm, stigma, or prosecution.

A total of 317 participants completed the measures of interest in the survey. The age range was between 25 and 68 years ( $M = 47.46$ ;  $SD = 12.06$ ); the tenure was distributed as follows: 42 participants with less than one year, 94 participants with one to three years, 40 participants with four to five years, 58 participants with six to ten years, and 168 participants with over ten years of tenure.

### Measures

The questionnaire comprised a set of socio-demographic questions (e.g., age, gender, tenure), followed by four sections with validated scales.

#### Environmental sensitivity

Environmental sensitivity can be phenotypically assessed in terms of Sensory Processing Sensitivity. For this purpose, we adopted the 12-item Highly Sensitive Person Scale<sup>7,8</sup>, recently validated in an Italian population<sup>40</sup>. The questionnaire fits a bifactor structure, with a general sensitivity factor and three subscales, namely aesthetic sensitivity, low sensory threshold, and ease of excitation. Each item is rated on a 7-point Likert scale from “1 - Not at all” to “7 - Extremely” (e.g., “Do you seem to be aware of subtleties in your environment?”, “Do you get rattled when you have a lot to do in a short amount of time?”). The internal consistency of the current sample has a Cronbach’s Alpha of 0.97, higher than the value (0.80) reported in the original validation paper by Pluess et al.<sup>8</sup>.

#### Job stressors

To assess job-related stressors, we employed a subset of the Job Stressor and Job Satisfaction Scale developed by Clarke et al.<sup>41</sup>, comprising six items that were specifically formulated to gauge various stressors commonly encountered in the workplace, such as excessive workloads, physical strain, and time constraints. However, we chose to exclude the sixth item, “I have very little freedom to decide how to do my work,” from our analysis due to its potential overlap with other measures captured in our questionnaire, particularly those pertaining to autocratic leadership style, which is characterized precisely by restricted individual freedom and autonomy. Participants were asked to rate on a 6-point Likert scale from “1 - Strongly disagree” to “6 - Strongly agree” how much they agreed with the proposed affirmations (e.g., “I often feel bothered or upset in my work”, “I am under constant time pressure due to a heavy workload”). The Cronbach’s Alpha for our sample is 0.72, in line with the value of 0.75 found by Clarke et al. in the validation of the Job Stressor sub-scale<sup>41</sup>.

#### Subjective well-being

Well-being is a subject of growing interest in both psychology and organizational studies, as it is widely regarded as the ultimate goal of personal and professional life. However, there is still no consensus on the definition of well-being: Diener et al. define it as a subjective experience of a positive affective state that includes life satisfaction, the presence of positive emotions, and the absence of negative emotions<sup>42</sup>, while Ryff and Singer propose a detailed multidimensional conceptualization including six key components: self-acceptance, positive interpersonal relations, autonomy, environmental mastery, purpose in life, and personal growth<sup>43</sup>. Furthermore, in organizational and management research, well-being is used interchangeably with work-related dimensions such as *job satisfaction*<sup>44</sup> or *organizational commitment*<sup>45</sup>.

In order to disentangle such ambiguity surrounding the definition and interpretation of well-being and provide both researchers and health and social care professionals with a practical tool to assess subjective well-being, the World Health Organization has developed the WHO-5 Well-being Index, a widely used tool<sup>46</sup> consisting of five items that measure positive mood, vitality, general interest, relaxation, and self-esteem<sup>47</sup>.

Thus, in the present paper, the construct of well-being is assessed through the use of the WHO-5 Index, where participants were asked to indicate on a 6-point Likert scale (from “0 - At no time” to “5 - All of the time”) how often they experienced certain feelings during the previous two weeks (e.g., “I have felt calm and relaxed”, “I woke up feeling fresh and rested”). The Cronbach’s Alpha for our sample is 0.85, in line with the values (between 0.82 and 0.89) found by Topp et al.<sup>46</sup>.

#### Leadership styles

Leadership, “the process of influencing others to contribute toward attaining group goals”<sup>48</sup> and leadership styles, which are sets of behaviors that leaders adopt to influence their subordinates<sup>49</sup>, have gained significant attention in organizational behavior in the past few decades due to their considerable impact on the success of organizations. Among the several conceptualizations proposed by researchers<sup>34,50</sup>, the present study focuses on the three primary leadership styles identified by Lewin, Lippit, and White in 1939<sup>51</sup> and revisited by Scheidlinger in 1994<sup>52</sup>: *autocratic* (or authoritative), *democratic* (or participative), and *let-it-be* (or ‘laissez-faire’).

We assessed participants’ perception of leadership styles through a set of eighteen closed questions adapted from the Leadership Style Questionnaire by Northouse<sup>53</sup>, where the participants were asked to indicate how much they agree with certain affirmations on a 6-point Likert scale (e.g., authoritative: “In my experience, within my team/company, employees are closely supervised to make sure they do their job”; democratic: “In my experience, employees in my team/company play an active role when it comes to making decisions”; let-it-be: “In complex situations, the supervisors in my team/company let the employees solve their own problems.”). The Cronbach’s

	Mean (SD)	1	2	3	4	5	6
1 Job stressors	3.25 (0.92)	(0.72)					
2 SPS	3.15 (0.56)	0.215*	(0.97)				
3 Democratic Leadership	4.53 (0.78)	-0.081	-0.077	(0.96)			
4 Let-it-be Leadership	4.33 (0.66)	0.002	0.067	0.577*	(0.94)		
5 Autocratic Leadership	2.92 (0.68)	0.075	0.045	-0.106*	-0.211*	(0.86)	
6 Subjective Well-being	4.10 (0.81)	-0.268*	-0.274*	0.326*	0.225*	0.025	(0.85)

**Table 1.** Correlation between study variables,  $N=317$ . \*  $p \leq .001$ . Values on the diagonal represent Cronbach's Alpha for each scale.

	B(SE)	$p$
SPS	-0.32(0.07)	<0.001
Job stressors	-0.17(0.04)	<0.001
Democratic leadership	0.23(0.06)	<0.001
Let it be leadership	0.16(0.08)	0.04
Autocratic leadership	0.12(0.07)	0.05

**Table 2.** Main effect regression model: SPS, Job stressors, and team leadership predicting well-being (adjusted  $R^2 = .21$ ).

Alpha in the current sample is 0.96 for the Democratic Leadership sub-scale, 0.94 for the Let-it-be Leadership sub-scale, and 0.86 for the Autocratic Leadership sub-scale.

### Analytic plan

We conducted analyses adopting the statistical software R. We first explored descriptively bivariate associations among study variables. Subsequently, we ran main effect regression models to investigate the main contribution of environmental sensitivity, job stressors and leadership styles on well-being. Then, we conducted a series of two-way interaction regression models to examine sensitivity interacting with job stressors and, separately, sensitivity interacting with leadership styles in predicting well-being. Additionally, we conducted three-way interaction models to investigate the simultaneous interaction between sensitivity, job stressors, and leadership styles.

This allowed us to explore not only the main effect of sensitivity on the main outcome variable of interest, that is well-being, but also to investigate the interactive contribution of sensitivity with job-related factors (stressors and leadership) in this process. We selected the model exploring data at best using Akaike Information Criteria (AIC)<sup>54,55</sup>, with lower levels supporting a better fit of the model to data. We then followed up the investigation of the best-selected model by exploring interaction parameters and graphically depicting findings.

## Results

### Descriptives

Descriptive statistics, presented in Table 1 alongside the mean (M) and standard deviation (SD) for each variable, indicated some small, yet significant, correlations. In particular, we observed a positive correlation between job stressors and Sensory Processing Sensitivity (SPS) as well as a negative correlation between job stressors and subjective well-being. SPS also negatively correlated with well-being at a bivariate level while no associations were found between SPS and perceived team leadership. Furthermore, we identified significant positive correlations between Democratic Leadership and subjective well-being ( $r = .326$ ), and Let-it-be leadership and subjective well-being ( $r = .225$ ).

### Main effect regression model

To examine how job stressors, leadership style, and Sensory Processing Sensitivity influence individual well-being, we conducted a linear regression analysis using the statistical software R. Regression parameters and associated significance levels are reported in Table 2. Results showed that SPS and job stressors were both related to lower levels of general well-being, whereas democratic and let-it-be leadership styles contributed to well-being positively. A positive effect also emerged for autocratic leadership on well-being, but the parameter was very low and the SE comparatively high.

### Interaction models

Afterwards, as we were interested in exploring how these variables interact with each other in predicting the individual's well-being, considering different sensitivity levels, we explored first a series of two-way (SPS x leadership; SPS x Job stressors) and subsequently of three-way interaction models (SPS x Job stressors x leadership), considering the different leadership styles in different univariate regression models. The main, two-way and three-way interaction models were compared considering AIC values, with lower values providing

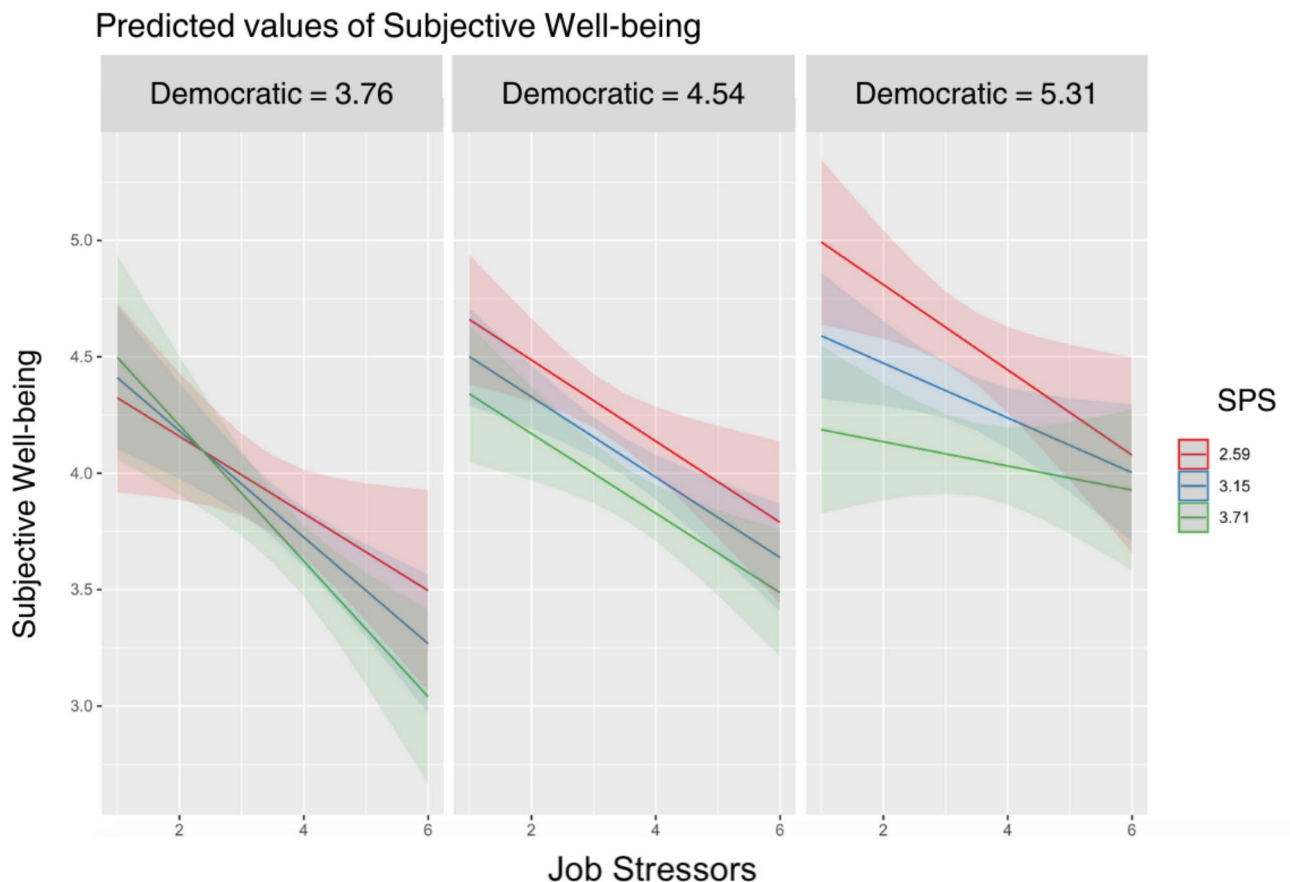
higher support to a model against the other tested models<sup>54,55</sup>. Then, we explored parameters and interaction effects for the model receiving most support.

#### *Interaction with democratic leadership*

AIC values for the main effect model and for the two-way (SPS x leadership; SPS x Job stressors) and three-way (SPS x Job stressors x leadership) interaction models were, respectively, 696.49; 694.73; 698.08 and 693.47. Adjusted  $R^2$  values were: .20, .21, .20, .22. Hence, findings provided support to the three-way interaction model as fitting data comparatively better than the other models. The three-way interaction parameter was significant,  $B(SE) = 0.15(0.07)$ ,  $p = .03$  and is graphically represented in Fig. 1 for medium, above, and below one standard deviation level for the SPS and democratic leadership style variables. The figure suggests that the higher the democratic style, the higher the well-being of everyone. But, importantly, in the presence of a high team democratic style, the bolstering effect of high-sensitivity individuals on stressors and well-being was reduced. That is, for those high-sensitivity individuals under high democratic leadership, the impact of the stressors on well-being is lower compared to those high-sensitivity individuals under low democratic leadership. Such findings support our hypothesis that a democratic leadership style may decrease the detrimental impact of job stressors on well-being, particularly for highly sensitive individuals.

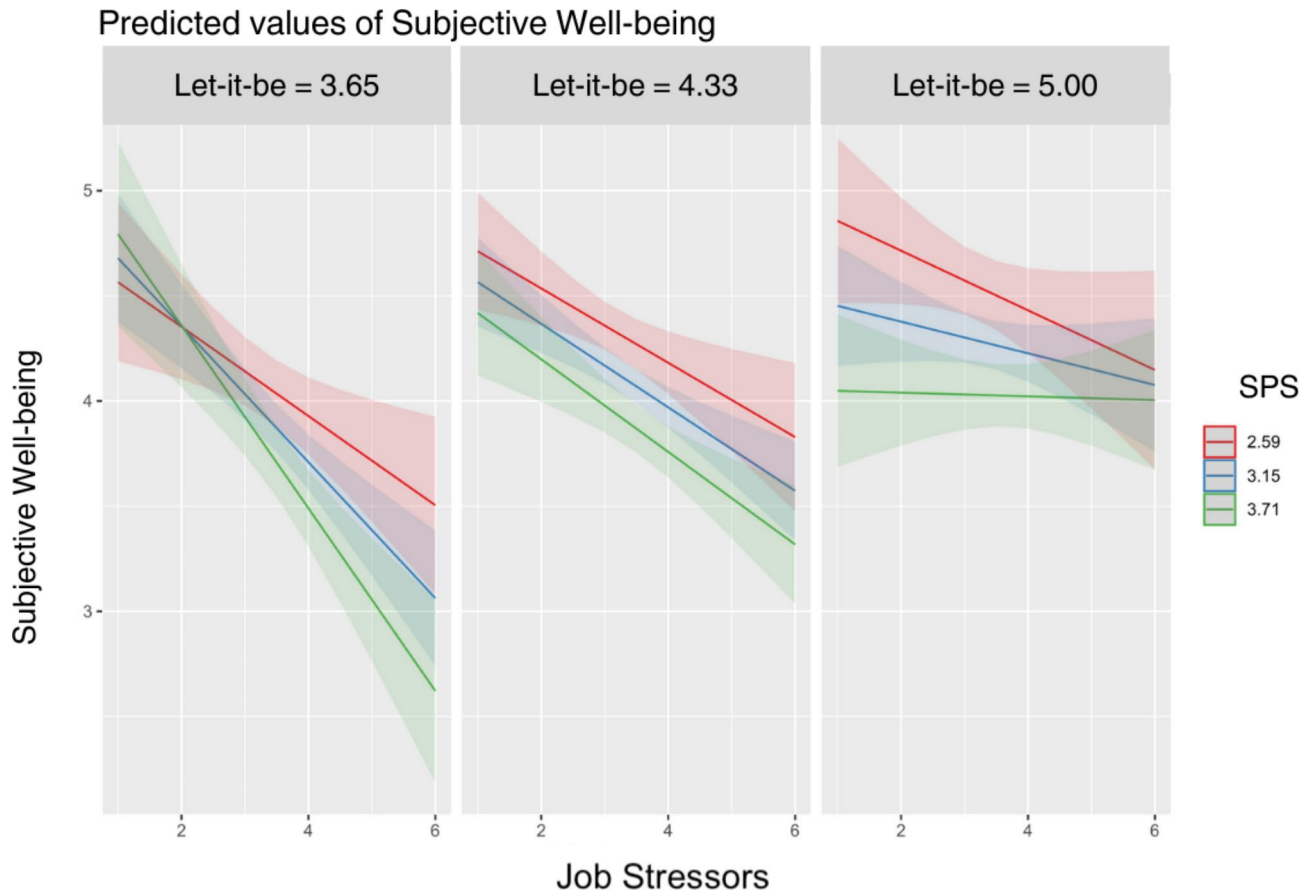
#### *Interaction with let-it-be leadership*

Findings were comparable when considering the let-it-be leadership style. Specifically, AIC values for the main model and for the two-way (SPS x leadership; SPS x Job stressors) and three-way (SPS x Job stressors x leadership) interaction model were, respectively, 707.10; 708.70; 709.01 and 696.26. Adjusted  $R^2$  values were .17 for the first three models and .21 for the three-way interaction model. Hence, findings provided support to the three-way interaction model as fitting data comparatively better than the main effect and two-way interaction models. The three-way interaction parameter was significant,  $B(SE) = 0.23(0.08)$ ,  $p = .004$  and is graphically represented in Fig. 2. As we also found in democratic style, the let-it-be style seems to buffer highly sensitive individuals against the spillover of work stress into their general well-being. That is, for those high-sensitivity individuals under high let-it-be leadership, the impact of the stressors on well-being is lower - and almost non-existent - compared to those high-sensitivity individuals under low let-it-be leadership. Such findings support our hypothesis that a positive leadership style characterized by a let-it-be approach protects highly sensitive individuals from the impact of stress on well-being.



**Fig. 1.** Three-way interaction model (Democratic Leadership).





**Fig. 2.** Three-way interaction model (Let-it-be Leadership).

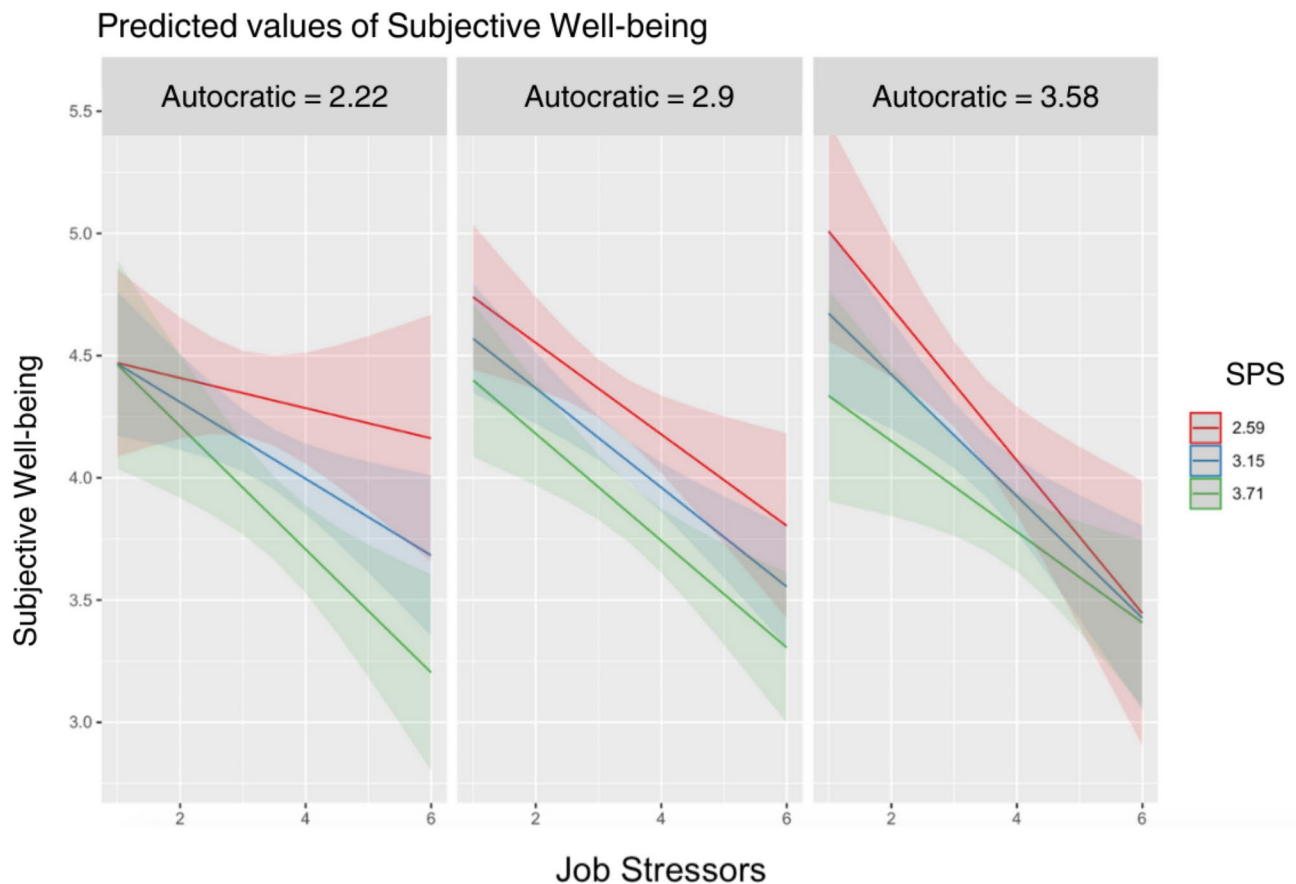
#### *Interaction with autocratic leadership*

The three-way interaction model was the most supported also for the autocratic leadership style. AIC values for the main effect model and for the two-way (SPS x leadership; SPS x Job stressors) and three-way (SPS x Job stressors x leadership) interaction models were, respectively 727.79, 727.42, 729.54, 725.68. Adjusted  $R^2$  values were .12, .12, .11, .13. The three-way interaction term was again significant and equal to  $B(SE)=0.21(0.07)$ ,  $p=.006$  and is graphically represented in Fig. 3. However, the follow-up interpretation of findings was not so straightforward. Specifically, individuals with low scores in autocratic leadership tend to report a weaker effect of job stressors on well-being, particularly for those who are less sensitive. However, contrary to what we hypothesized, for highly sensitive individuals, autocratic leadership does not appear to play a significant role in influencing subjective well-being.

## Discussions

The results of our study offer valuable insights into the complex interplay between job stressors, sensitivity, and team-level leadership styles in influencing subjective well-being. Our main effect regression models revealed that higher levels of job stressors and overall sensitivity were significantly associated with lower subjective well-being scores. These findings align with existing research, emphasizing the detrimental impact of job stressors on individual well-being and the relevance of sensitivity as a factor contributing to subjective well-being outcomes<sup>23,24,56</sup>. Specifically pertaining to sensitivity, our study aligns with previous findings that report a small correlation between sensitivity and both negative affect and lower well-being in adulthood<sup>40,57</sup>. However, this correlation is not observed in childhood, where higher sensitivity does not seem to impact well-being unless combined with an unfavorable environment, consistent with the differential susceptibility perspective<sup>22,58</sup>. This finding suggests the need to explore how environmental, cultural, or job-related factors in adulthood may pose additional challenges for highly sensitive individuals. Alternatively, the small correlation between sensitivity and neuroticism found in several studies may explain this relationship. Nonetheless, even when controlling for neuroticism, sensitivity still appears to predict lower well-being in adult samples<sup>40</sup>.

What emerged to promote well-being for all was experiencing higher levels of democratic and let-it-be leadership styles, suggesting that leadership practices promoting participative decision-making and autonomy within teams may foster positive well-being outcomes among individuals. This finding is consistent with previous studies highlighting the importance of supportive and empowering leadership styles in promoting employee well-being<sup>59</sup>. Moving our attention to the interplay between organizational and individual variables, we explored a series of regression models, and a three-way interaction model with sensitivity, leadership style and stress



**Fig. 3.** Three-way interaction model (Autocratic Leadership).

predicting well-being received the strongest support. Findings specifically showed that individuals with a high sensitivity, who have been reported in the empirical literature to be more at risk for stress at work<sup>23,24</sup>, and reported lower levels of well-being also in our sample, were more able to benefit from positive leadership styles. In fact, for highly sensitive individuals more than for others, higher levels of democratic and let-it-be leadership were found to mitigate the impact of stressors experienced at work (which are part of the everyday experience of many workers) on well-being. Hence, this suggests that highly sensitive individuals may be particularly attuned to relational and leadership aspects. Improving specific job-related variables could impact their well-being, with potential implications for their quality of life, organizational aspects and productivity at work. This finding aligns with theories on environmental sensitivity, positing that highly sensitive individuals are more receptive to the quality of their environment. This heightened responsiveness identifies specific environmental factors that could be targeted for intervention programs<sup>29</sup>. Interestingly, in our sample the let-it-be leadership style also demonstrated a strong ability to mitigate the impact of job stressors on well-being, particularly in highly sensitive individuals, highlighting its potential as a protective factor. The hands-off approach of let-it-be leadership may offer employees more autonomy and control over their work, thereby reducing the negative impact of job stressors on well-being<sup>24,60</sup>, and this seems to be particularly true for highly sensitive individuals. This may be explained by the slightly higher levels of anxiety and stress often reported by highly sensitive individuals, for whom a let-it-be style may be especially protective in work contexts. A less expected pattern of findings emerged for the autocratic style. In this case, individuals characterized by lower levels of sensitivity appeared to be more influenced by leadership style than their more sensitive counterparts. A possible explanation is that lower levels of an autocratic style still do not necessarily suggest a positive environment. For highly sensitive individuals, the mere absence of negative leadership may not be enough to buffer the effects of job stressors on well-being; they need higher levels of a positive one. It is to be noted, moreover, that in comparison to the other two leadership styles considered, participants reported overall lower scores on the autocratic leadership style which may also suggest that this style was not sufficiently represented in our sample. Thus, to gain a deeper understanding of the specificity of autocratic leadership, additional investigation might be warranted in organizational contexts with a higher variability in relation to this negative leadership style.

## Conclusions

In this study, we aimed to investigate the combined impact of job stressors, environmental sensitivity, and leadership styles on subjective well-being. Our findings revealed significant associations between these variables and shed light on their complex interplay.

Consistent with previous research, higher levels of job stressors and overall higher levels of sensitivity were linked to lower subjective well-being scores. On the other hand, however, the presence of democratic and let-it-be leadership styles was associated with higher well-being scores and was found to mitigate the effect of job stressors on well-being, especially for highly sensitive people. This finding aligns with the concept of environmental sensitivity in the sense that for higher sensitivity levels the impact of the environment seems to increase. It further suggests that leadership may be a target variable for improving the well-being of all individuals, particularly those more at risk of stress and burnout, with ethical implications for the individual and practical implications for the work context. Lower levels of autocratic style, however, were not sufficient to protect highly sensitive individuals, who tend to be more vulnerable to stress in work contexts.

### Implications

From a theoretical and academic perspective, our study enriches the existing literature by highlighting the significance of sensitivity as a crucial factor in influencing well-being outcomes. It further suggests that although higher levels of sensitivity may be associated with lower well-being, there are specific variables of the work context, such as leadership styles, that could be targeted for improving the well-being of all individuals, particularly of those potentially more at risk of stress. Our findings specifically suggest an advantage effect and further seems to suggest that sensitivity is not to be interpreted only as a mere vulnerability to negative stimuli but also as a heightened receptivity to positive ones, offering theoretical and practical implications for both researchers and practitioners in the field of organizational behavior. This contributes to a deeper comprehension of individual differences within the workforce and how they interact with various work-related factors, and provides a foundation for further investigations into the complexities of sensitivity and its impact on individual outcomes in the organizational context.

From a practical standpoint, our findings provide valuable insights for organizations and leaders seeking to promote employee well-being and highlight how acknowledging and accommodating individual differences in sensitivity can help tailor leadership practices to the unique needs of employees, ultimately contributing to a healthier and more productive work environment. Recognizing the importance of environmental sensitivity in the workplace, leaders can adopt a more tailored approach to their leadership styles, considering the individual differences in sensitivity among team members. Empowering and participative leadership styles may be particularly beneficial for highly sensitive individuals, as they respond positively to both supportive and “laissez-faire” work environments. By creating an atmosphere that acknowledges and embraces sensitivity, organizations can foster a more engaged, motivated, and satisfied workforce.

### Limitations and future research

While our study has provided valuable insights, it is essential to acknowledge its limitations. One significant limitation is that all participants involved in the study reported relatively low scores of perceived autocratic leadership. This circumstance hindered our ability to adequately analyze the complex interplay of job stressors, leadership style, and sensitivity in more autocratic contexts. To gain a comprehensive understanding of how these variables interact in such settings, further investigation with a dedicated study would be warranted.

Additionally, our study relied on self-reported measures for the variables of interest (e.g., well-being, sensitivity, and job stressors). While the psychological scales we employed are validated and widely used, it is important to acknowledge the inherent limitation of relying solely on explicit answers from participants. Future research could address this issue by incorporating alternative methods to assess well-being, sensitivity, and job stressors, such as implicit measures or observational techniques. Moreover, it would be important to explore whether and how higher levels of well-being have actual implications on other variables, such as productivity at work, creativity, and better well-being of people part of a team. Combining multiple data collection approaches and exploring the actual impact of these processes on work outcomes could provide a more robust and comprehensive understanding of the relationships between these variables.

### Data availability

The datasets used and/or analysed during the current study available from the corresponding author on reasonable request.

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G.O.: conceptualization, methodology, investigation, writing-original draft, writing-review & editing. F.B.: investigation, writing-original draft, writing-review & editing. F.L.: conceptualization, methodology, formal analysis, writing-review & editing. M.F.: supervision. R.P. funding acquisition, project administration. All authors contributed to the article and approved the submitted version.

### Competing interests

The authors declare no competing interests.

### Additional information

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