MANAGEMENT
2026, Vol. 30, No. 1
www.management-poland.com
DOI: 10.58691/man/218510

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Effects of employees' perceived impact and silence on adaptive performance: mediating roles of voice quality and self-regulation depletion

Abstract

Research background and purpose: The current study aims to investigate whether employees' perceived impact on their work environment triggers voice quality and influences their adaptive performance. We ground this conceptualization in the reasoning of social exchange theory. This study also examines the underlying mechanism between silence and adaptive performance through the mediating role of self-regulation depletion.

Design/methodology/approach: A sample of 301 participants was collected from the higher education sector of Pakistan to test the hypothesized relationships. We employed SPSS 26 for preliminary analyses. The model was tested using PLS-SEM in SmartPLS 4.0 to examine the study hypotheses.

Findings: Our findings indicated a direct relationship between perceived impact on the environment and adaptive performance, as well as between employee silence and adaptive performance. Interestingly, the effect of perceived impact on adaptive performance via voice quality was positive and significant. The effect of employee silence on adaptive performance via self-regulation depletion was significant but negative, contrary to expectations.

Contribution and limitations: The current study makes a significant contribution to the existing literature on voice quality and silence by offering a fresh perspective on the underlying mechanisms that link perceived impact on the environment and employee silence to adaptive performance, particularly within the rapidly changing environment of higher education institutions (HEIs) in Pakistan. Finally, the research implications and future research directions are discussed

Keywords: *perceived impact, voice quality, silence, self-regulation depletion, adaptive performance*

JEL Classification: O15, M54, I39, J24, J29

Received: 2025-12-25; **Revised:** 2026-02-06; **Accepted:** 2026-02-24

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1. Introduction

Employees drive organizational success when they can truly thrive at work, as they perform to their full potential and constantly innovate (Wang et al., 2024a). However, in today's fast-changing workplaces, adapting to new work designs and shifting job demands has become more difficult than ever. In today's turbulent and unpredictable work environment, much of how employees respond to these changes depends on their potential contributions, such as their own perception about their capability and their perceived impact on the organizational environment, which act as a catalyst to perform well. That makes it an interesting line of inquiry to examine how employees' perception of their own impact can affect their performance level (Sherf et al., 2021), particularly their adaptive performance, which is now considered a significant outcome yet remains underexplored (Park & Park, 2020).

The relevance of adaptive performance has become more noticeable in recent years, especially during the global COVID-19 pandemic. Since the pandemic changed the way organizations work, it also emphasized the need to understand adaptive performance and its potential antecedents (Tang et al., 2024a). During this time of global pandemic, many employees faced stress due to job insecurity, unstable work conditions, and the feeling of being closely monitored through technology, which affected the trajectory of their performance (Huang et al., 2021). Several studies have emphasized the need to study adaptive performance, especially in the post-COVID-19 era, as it has turned out to be a dynamic performance indicator different from task performance and contextual performance through which employees not only fight back against organizational changes but also handle challenges more confidently (Junca-Silva & Caetano, 2023).

Building upon this premise, the present study departs from past literature and broadens its scope to examine employees' perceived impact on the environment in relation to the extent to which it influences their own adaptive performance. It further seeks to explore whether employee voice quality can explain this relationship - an area that has remained completely overlooked in the past. With the increasing emphasis on adaptive performance and responding to the urgent call by Brykman and Raver (2021), this study proposes that it is voice quality, rather than merely voice, that makes employee effective in performing under adaptive work conditions. This argument is also based on the premise which states that voice failing to provide feasible solutions may be considered ineffective and not duly appreciated by managers (Whiting et al., 2012). Therefore, consistent with the theoretical perspective of Brykman and Raver (2021) who were the first to introduce the construct of voice quality, and integrating Whiting et al. (2012) line of argument, we acknowledge that voice quality is a comprehensive measure that captures employees' intentions to benefit their organization through its main characteristics i.e., voice based on its rationality, feasibility, having an

organizational focus, and, importantly, novelty (Stumpf, 2024). This also resonates with the broader international context, where organizations seek to minimize risks through hybrid work arrangements, innovative work methodologies, and managing uncertainty, while simultaneously enhancing both organizational and employee productivity in the long term (Junca-Silva & Caetano, 2023). In parallel, employee performance has increasingly been recognized, alongside technological innovation and core organizational functioning, as one of the complex and critical phenomena with the potential to achieve success and drive overall organizational transformation (Goraya et al., 2026).

The current study recognizes that not all employees possess the full potential to address organizational issues, as some choose silence over expressing their voice. This may occur due to the complete absence of institutional support systems, leading employees into a state of silence in which they experience depletion of self-regulatory resources, ultimately reducing their performance level. This perspective aligns with the ongoing discussion by Sherf et al. (2021), who invite others to investigate the impact of silence on employee performance through an underlying mechanism. In their conceptualization, they argued that voice and silence are independent and distinct constructs and this difference between voice and silence rests upon the Behavioral Activation System (BAS) and Behavioral Inhibition System (BIS) where the former triggers employees to raise their voice while the latter discourages voice by provoking them to maintain silence. While responding to their call, we propose that self-regulation depletion serves as the underlying mechanism linking silence to reduced adaptive performance.

Mawritz et al. (2017, p. 1484) defined self-regulation as "A process of using regulatory resources to control undesirable impulses and override subsequent behavioral responses". The authors explained that self-regulation theory can help understand how people react when they experience mistreatment from others. In such a condition, an individual may lose self-control, which can lead to sleep problems, imbalances in work-life patterns, and restrict them while taking any action and making important decisions. As a result, employees who often remain silent tend to use up their self-regulatory resources, which reduces their energy levels (Mitchell et al., 2019; Watkins & Umphress, 2020). All of this discussion leads to the main question of this research: What makes employees choose to speak up or stay silent, and what are the underlying mechanisms through which an employee's perceived impact on the environment and silence may impact their performance?

To better address this question, social exchange theory (Blau, 1964) provides a possible explanation about the phenomenon of reciprocity in which employees repay the negative and positive deeds back to others (Cropanzano & Mitchell, 2005). Thus, when employees have sufficient control over the environment, it creates the opportunity for them to raise high-quality voice which will positively contribute to their performance

and all that happens through the process of reinforcement. Conversely, maintaining frequent silence causes depletion in self-regulatory resources and ultimately, a person negatively reciprocates which lowers their performance level. Thus, the current study empirically tests if perceived impact on the environment enables voice quality to predict adaptive performance. Specifically, we uncover the underlying mechanism linking silence and adaptive performance through the mediating mechanism of self-regulation depletion.

2. Literature review

2.1. Perceived impact over environment and adaptive performance

Ever since the term was first coined by Pulakos et al. (2000, p. 615), adaptive performance – defined as "altering behavior to meet the demands of a new situation, event, or set of circumstances" has emerged as a distinct dimension of employee performance, differing from task performance, innovative work performance or contextual performance, etc. (e.g., Kluemper et al., 2013; Soyer et al., 2022). Many authors have undertaken studies to explain this construct, but it remains unexplored. Research supports the idea that perceived impact can be linked with employee voice behavior, and under certain conditions, it may be related to silence behavior (Sherf et al., 2021). Building on this, Lee et al. (2024) refer to Spreitzer's (1995) definition of perceived impact – a personal belief shaped by the existing work environment. This belief has the potential to significantly shape organizational outcomes. In contrast, Sessions et al. (2021) support the conception that being competent and having one's impact not only enables change but also has the potential to shape both work itself and the surrounding context. Fundamentally, perceived impact is known as one of the core aspects of psychological empowerment as well, which according to Spreitzer (1995) is defined as an employee's self-belief that they can influence and contribute to their work. Further elaborating it, Rigolizzo et al. (2023) emphasize the importance of investigating the relationship between employee empowerment and performance, particularly in a unique context of adaptive selling within a charged and dynamic work environment. However, the findings of past research remain inconclusive while linking perceived impact with adaptive performance with only a few exceptions such as Pacheco and Coello-Montecel (2023) who attempt to relate perceived impact with job task performance and Messmann and Mulder (2014) who found perceived impact to be positively correlated with innovative work performance. Based upon this premise, we emphasize that perceived impact within an environment characterized by its attributes empowers individuals to enhance their adaptive performance. Thus, the following hypothesis is proposed (Figure 1):

H1. Employee's perceived impact is associated with adaptive performance.

2.2. Mediation of voice quality

An employee's perceived impact does not only lead to productivity but also enhances their performance (Bolino & Grant, 2016). However, when employees encounter challenges such as limited access to resources, their performance may suffer (Kim et al., 2022). Previous studies have linked perceived impact with several important outcomes. For instance, Ibrahim (2020) found a strong relationship between perceived impact and organizational commitment, asserting that a small increase in employees' perceived impact can lead to a significant increase in their commitment. Building on the main principle of reciprocity of the social exchange theory, we propose that perceived impact acts as a source of motivation (Swiatczak, 2021) encouraging employees to express high-quality voice (Brykman & Raver, 2021) and engage more effectively in adaptive performance (Kaltiainen & Hakanen, 2022). Since Brykman and Raver (2021) employed the overall scale of voice quality to measure this behavior, it is prudent to adopt the same approach in the present study as well. Therefore, the following hypothesis is proposed (Figure 1):

H2. Voice quality mediates the relationship between perceived impact on the environment and adaptive performance.

2.3. Employee silence and adaptive performance

Since adaptive performance has been conceptualized as an essentially important performance indicator that has become increasingly important in uncertain and rapidly changing environments (Junca-Silva & Caetano, 2023), it is important to determine when employee silence affects adaptive performance. A recent review by Dehkharghani et al. (2023) discusses the negative side of silence from an employee's level perspective such that there can be sufficient reason for an employee to switch to the silence state for instance when leadership is not aligned with subordinates, or in some cases employees are exposed to emotions, fear of loss, risk and loneliness. Previous research has investigated the connection between defensive silence and several other outcomes, such as task performance, contextual performance, and turnover intentions (Shaukat & Khurshid, 2022). However, the specific link between overall employee silence behavior and adaptive performance has been completely overlooked in the extant literature. Existing literature also remains inconsistent, as most studies have not extended the discussion of employee silence beyond its main characteristics to examine its influence on important organizational outcomes (Whiteside & Barclay, 2013). To address this gap, the present study proposes the third hypothesis (Figure 1),

H3. Employee silence is related to adaptive performance.

2.4. Mediation of self-regulation depletion

Research on adaptive performance in relation to self-regulation is far limited (Stasielowicz, 2019). When a person loses control over self-regulatory resources, such as self-control, it can affect their thinking and attenuate their performance (Wehrt et al., 2022). While studies have explored employee silence and organizational outcomes, less is known about whether silence predicts adaptive performance through self-regulation depletion (Watkins & Umphress, 2020; Thau and Mitchell, 2010; Denson et al., 2011). Sometimes, employees are silent even when organizations encourage open communication (Wang et al., 2024b). The silence depletes their regulatory resources, leaving them exhausted and cynical (Shipton et al., 2024, p. 182). Employees may remain silent during rapid market changes and miss important information, which impairs their performance (Yu et al., 2023). When self-regulatory resources are drained, employees struggle to perform and achieve their goals (Sun et al., 2023). For instance, it was found that silence can indirectly affect outcomes like task performance and deviant behavior through increased stress (Dong & Chung, 2021). Research shows that threats to self-regulation significantly reduce their adaptive task performance compared to employees who do not face such threats (Niessen & Jimmieson, 2016). In brief, based on this line of argument, we propose our next mediation hypothesis (Figure 1):

H4. Self-regulation depletion mediates the relationship between employee silence and adaptive performance.

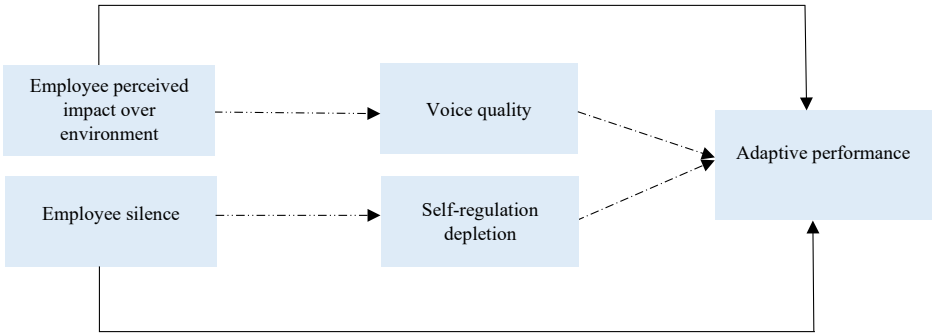

Figure 1. **Theoretical framework**

Source: own study

3. Research methodology

3.1. Sample and procedure

Data was drawn from the participants employed in public and private higher education institutions (HEIs) across all provinces of Pakistan, including the Federal/Capital territory, Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan, and Gilgit-Baltistan. We employed a non-probability sampling approach to select the study participants and utilized a purposive sampling technique to reach employees in these HEIs. To collect the data, questionnaire-based survey forms available on Google Docs were emailed to faculty members across various university departments. Participants were informed that the survey was completely anonymous, and that lecturers through to professors were eligible to complete the questionnaire upon providing informed consent. The same set of questions was also distributed through paper-based questionnaires to universities located within the twin cities of Islamabad and Rawalpindi. As part of our sampling strategy and to ensure anonymity, department heads were first requested to distribute the forms among their faculty and return the completed responses to the researcher. This approach was adopted to encourage participants to freely express their opinions without concerns about confidentiality.

Data collection began in the last week of June 2025 and concluded in the second week of September 2025. Due to the summer vacation period, many faculty members were on leave and returned shortly before the semester commenced. To address this, the Google Form link was also emailed to the addresses available on university websites. In total, 241 responses were received via the online survey, and 62 paper-based questionnaires were collected. After data screening, 60 of the paper-based responses were found to be valid and included as part of the final data set. Thus, the total usable sample for this study consisted of 301 respondents, which was subsequently used for data analysis. Table 1 presents their demographic characteristics.

Table 1. **Sample profile**

Demographic characteristic		Frequencies	Percentage
Sample		301	100%
Gender	Male	184	61.1%
	Female	115	38.2%
	Not reported	2	.7%

Age groups	Less than 25	8	2.7%
	25-30 years	28	9.3%
	31-35 years	60	19.9%
	36-40 years	84	27.9%
	41-45 years	57	18.9%
	46-50 years	27	9.0%
	51-55 years	19	6.3%
	56-60 years	7	2.3%
	Over 60	11	3.7%
Qualification	Graduate	9	3.0%
	Postgraduate	88	29.2%
	Doctorate	165	54.8%
	Post-doctorate	39	13%
Position	Professor	20	6.6%
	Associate professor	56	18.6%
	Assistant professor	102	33.9%
	Lecturer	123	40.9%
University	Public	210	69.8%
	Private	91	30.2%

Source: own study

3.2. Measures

Perceived impact (PI) and employee silence (ES). Employees perceived impact and employee silence, with three items for each variable were adopted from Sherf et al. (2021). A sample item was "The impact of my work on that of my team/unit is large" and for

ES the sample item was "I keep quiet and do not make recommendations about how to fix work-related problem". ES was measured on frequency scales ranging from one for 'never' to five for 'very frequently'.

Self-regulation depletion (SRD). It was measured using a seven items scale from which five items were adopted from Deng et al. (2016) with a sample scale item "I felt drained (i.e., tired)" anchored on a five-point frequency-based Likert scale i.e., one for Never to five for Always. The authors adopted five-items to assess ego depletion developed by Twenge et al. (2004) which was further validated by Ciarocco et al. (2007). The two additional items with statements "It took a lot of effort for me to concentrate on something" and "My mind felt unfocused" were adopted from Christian and Ellis (2011).

Voice quality (VQ). A 12-item scale was adapted from Brykman and Raver (2021) who originally developed the construct. The sample items were "I propose an idea that aligns with the organizational goals" and "I propose an innovative solution to address a current problem". We used self-reporting measures rather than other -rated measures to measure voice quality as recommended by Brykman and Raver (2021). It was also consistent with the idea that employees can more accurately assess their own voice quality (Ng et al., 2022).

Adaptive performance (AP). It was measured with a 19-items scale developed by Charbonnier-Voirin and Roussel (2012). Sample items were "I developed good relationships with all my counterparts which was an important factor in my effectiveness" and "I willingly adapted my behavior whenever I needed to in order to work well with others".

4. Results

We analyzed all results in SmartPLS 4.0 and SPSS 26. First, we calculated the measurement model (Figure 2) to assess the reliability and validity of the study constructs. Table 2 highlighted the indicators that represent a good level of convergent validity. Specifically, the construct composite reliabilities showed a considerably high level of reliability, with the smallest value for ES i.e., 0.843. By employing the Fornell-Larckar criterion as presented in Table 3, it was confirmed that collectively the results revealed a good convergent and discriminant validity (Fornell & Larcker, 1981). Moreover, as shown in the Table 4 below, we analyzed the values of HTMT ratio and no values were exceeding the threshold (0.9).

Table 2. **Reliability and validity**

Construct	Indicator	Factor-loading	Cronbach's alpha	Composite reliability	AVE
PI	PI1	0.815	0.809	0.887	0.724
	PI2	0.862			
	PI3	0.875			
ES	ES1	0.877	0.726	0.843	0.646
	ES2	0.624			
	ES3	0.883			
VQ	VQ1	0.747	0.926	0.937	0.555
	VQ2	0.739			
	VQ3	0.747			
	VQ4	0.716			
	VQ5	0.723			
	VQ6	0.688			
	VQ7	0.768			
	VQ8	0.789			
	VQ9	0.820			
	VQ10	0.786			
	VQ11	0.795			
	VQ12	0.594			
SRD	SRD1	0.584	0.871	0.899	0.562
	SRD2	0.665			
	SRD3	0.790			
	SRD4	0.740			
	SRD5	0.834			
	SRD6	0.776			
	SRD7	0.827			

AP	AP1	0.640	0.949	0.954	0.521
	AP2	0.750			
	AP3	0.633			
	AP4	0.701			
	AP5	0.777			
	AP6	0.780			
	AP7	0.758			
	AP8	0.775			
	AP9	0.727			
	AP10	0.750			
	AP11	0.780			
	AP12	0.641			
	AP13	0.693			
	AP14	0.754			
	AP15	0.704			
	AP16	0.628			
	AP17	0.751			
	AP18	0.720			
	AP19	0.725			

Source: own study

Table 3. **Fornell-Larcker criterion**

	AP	ES	PI	SRD	VQ
AP	**0.722**				
ES	-0.350	0.804			
PI	0.539	-0.132	0.851		
SRD	-0.513	0.457	-0.251	0.750	
VQ	0.638	-0.289	0.559	-0.296	0.745

Source: own study

Table 4. **Discriminant validity-Heterotrait-monotraite (HTMT) ratio**

	AP	ES	PI	SRD	VQ
AP					
ES	0.387				
PI	0.613	0.162			
SRD	0.532	0.551	0.290		
VQ	0.676	0.347	0.642	0.306	

Source: own study

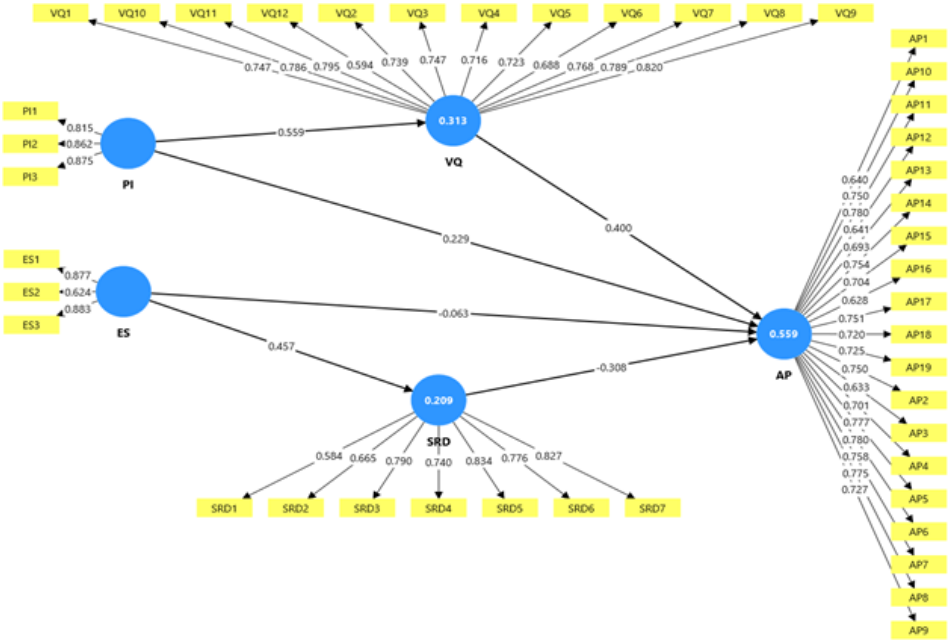

Figure 2. **Measurement model**

Source: own study

4.1. Common method bias (CMB)

Harman's single-factor analysis revealed that although all constructs loaded onto a single factor, the estimated value was 34.845% which was far below the 50% threshold, suggesting that CBM was not a problem that could put the model at risk (Podsakoff et al., 2003). Moreover, all VIF values ranged from 1.473 to 3.216, confirming that there was no concern regarding multicollinearity among the constructs. In addition, the use of an anonymous approach in collecting responses from participants ensured the collection of genuine responses.

4.2. Hypotheses testing

Initially we analyzed the effects of employees' perceive impact and employee silence towards adaptive performance in the absence of voice quality and self-regulation depletion constructs as mediators. H1 predicted that employee's perceived impact would be positively associated with adaptive performance. As shown in Table 8 below, it was confirmed that employees' perceived impact was statistically significant for employee's adaptive performance with β=0.453, $p<0.001$. We also found support for the other hypothesis H3 which proposed that employee silence was related to the employee's adaptive performance. Likewise, employee silence was found to be significantly associated with adaptive performance with β=-0.204, $p<0.01$).

Table 5. **Mean scores, standard deviations, correlations**

	Mean	SD	PI	ES	VQ	SRD	AP
PI	3.59	0.81					
ES	2.70	0.96	-0.12*				
VQ	3.91	0.65	0.55**	-0.28**			
SRD	2.51	0.77	-0.24**	0.44**	-0.27**		
AP	3.85	0.62	0.54**	-0.31**	0.63**	-0.49**	

Note: *p<0.05 and **p<0.01

Source: own study

As indicated in Table 5, statistical estimates for all the constructs were calculated as PI mean score was 3.59 with SD. 0.81, mean score of ES was 2.70 with SD = 0.96, mean score of VQ was 3.91 while value of SD stood at 0.65, SRD mean score 2.51 with SD score estimated at 0.77 and AP's mean score was 3.85 with SD=0.62. As shown above, all correlation values were found significant. It can therefore be confirmed that the participants' perceived impact on their environment was sufficient and positively predicted their adaptive performance. However, even ES was found statistically significant the mean score suggests that faculty members were not found to be involved in silence behavior that could decrease their performance and likewise, they did not experience depletion in these regulatory resources.

Table 6. **Path coefficients**

	Beta-value	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
ES->AP	**-0.063**	**-0.064**	0.054	**1.165**	**p=0.244**
ES->SRD	**0.457**	**0.462**	0.051	8.928	p<0.001
PI->AP	**0.229**	**0.225**	0.052	**4.410**	p<0.001
PI->VQ	**0.559**	**0.561**	0.054	10.339	p<0.001
SRD->AP	**-0.308**	**-0.306**	0.054	5.760	p<0.001
VQ->AP	**0.400**	**0.406**	0.080	5.021	p<0.001

Source: own study

Table 7. **Specific indirect effects**

	Beta-value	Sample mean (M)	Standard deviation (STDEV)	T-value	P values
ES->SRD ->AP	**-0.141**	**-0.141**	**0.029**	**4.906**	p<0.001
PI->VQ->AP	**0.224**	**0.228**	**0.049**	**4.549**	p<0.001

Source: own study

Table 8. **Total effects**

	Beta-value	Sample mean (M)	Standard deviation (STDEV)	T-value	P values
ES->AP	-0.204	-0.205	0.060	3.402	p=0.001
ES->SRD	0.457	0.462	0.051	8.928	p<0.001
PI->AP	0.453	0.453	0.060	7.529	p<0.001
PI->VQ	0.559	0.561	0.054	10.339	p<0.001
SRD->AP	-0.308	-0.306	0.054	5.760	p<0.001
VQ->AP	0.400	0.406	0.080	5.021	p<0.001

Source: own study

4.3. Mediation analysis

Partial Least Squares Structural Equation Modeling (PLS-SEM) based mediation analysis was conducted using SmartPLS 4.0 to examine the mediating role of VQ in the relationship between PI and AP. A bootstrapped procedure with 5000 replications was employed to assess the mediation effects (results reported in Table 7-8; Figure 3). The total effect of PI on AP was statistically significant (β=0.453, t=7.529, p<0.001). After including VQ as a mediator, the direct effect of PI on AP remained significant (β=0.229, t=4.410, p<0.001). Moreover, the indirect effect of PI on AP through VQ was also significant (β=0.224, t=4.549, p<0.001). These results demonstrate that VQ partially mediated the relationship between PI and AP.

Mediation analysis was conducted to examine the mediating role of SRD on the linkage between ES and AP. The total effect of ES on AP was statistically significant (β=-0.204, t=3.402, p<0.01). However, after including SRD as a mediator, the direct effect of ES on AP became non-significant (β= -0.063, t=1.165, p>0.05; (see Table 6). In contrast, the indirect effect of ES on AP through SRD was statistically significant (β= -0.141, t=4.906, p<0.001). These results indicated that the relationship between ES and AP was fully mediated by SRD, suggesting that ES influenced AP through its effect on SRD rather than directly. Although the mediation effect was statistically significant, the mean scores for ES (M=2.7) and SRD (M=2.51) indicated that participants did not experience silence or substantial depletion of self-regulatory resources.

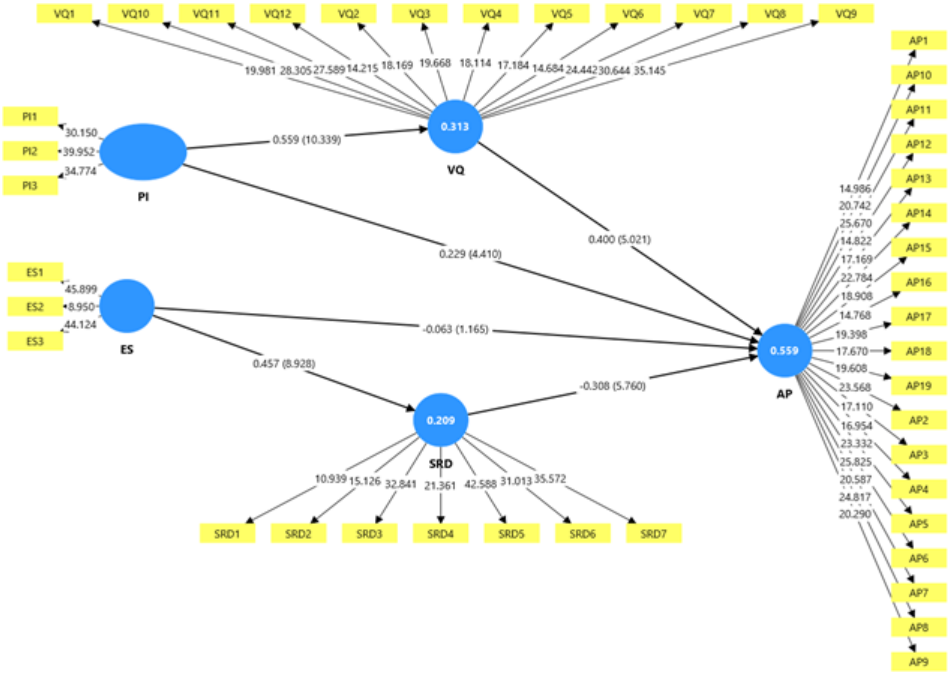

Figure 3. **Bootstrapped structural model**

Source: own study

5. Discussion and conclusion

The purpose of the present research was to empirically examine the dual paths of employee behaviors that predict adaptive performance differently. On one side, there are employees who are confident in positively contributing through the effective ideas and fixing organizational issues, which make them better able to perform in the organization. On the other side, there are employees who do not perform because they are in constant silence. Specifically, this study investigates if employees' perceived impact on the environment predicts their adaptive performance and assesses this direct relationship in the presence of mediating role of voice quality. Contrarily, the study sought to examine the relationship between employee silence and adaptive performance and capture the given relationship through underlying mechanism of self-regulation depletion.

Social exchange theory (SET) serves as a useful framework to provide potential reasoning to understand these theoretical underpinnings. SET discusses the process of reciprocity, through which we propose that when employees feel empowered and develop self-esteem within their immediate work environment, they become a good resource and work in the favor of their organizations by proposing rational, feasible, novel and organizational-focused ideas. This way a combination of their own perception based on their individual impact and voice quality behavior tends to play a sufficient role that enables them to implement their ideas into action, especially in the ever-changing and fast-paced environment of Higher Education Institutes (HEIs) in Pakistan.

Unlike other sectors of industry, in this sector, workplace dynamics are constantly evolving, and employees face increasing job demands, pressure for a positive contribution and perform well (Imran et al., 2025). Since the participants of this study were faculty members from public and private universities in Pakistan, it was recognized that the nature of their roles required substantial effort and challenged them to come up with creative ideas that could benefit their organizations in several ways. The findings of this study support this view.

Faculty members felt empowered and believed that their work had a positive impact on others. These perceptions about their impact fostered higher-quality voice behavior, which not only improved their performance but also added to overall organizational productivity. This finding of the study is also consistent with Sherf et al. (2021), in which the authors argued that perceived impact may affect an employee's performance. Since voice quality may largely be shaped by the cognitive elaborations of the voicer (Jiang et al., 2025) and employee voice behavior presents significant challenges in a work environment (Maynes et al. 2024), it was prudent to examine if the construct of voice quality acts as an intricate mechanism that can explain this direct relationship between 'impact-performance'. Brykman and Raver (2021) set of arguments supports this finding of our study, in which the authors emphasized the need to identify potential antecedents of voice quality that ultimately lead to significant outcomes for individuals. To the best of our knowledge, this is the only and first study which has captured the less researched areas and empirically tested the influence of employee perceived impact as an antecedent of voice quality and adaptive performance.

We further expected that regardless of how frequently employees speak up, it is the perceived effectiveness of their voice that determines whether it is truly heard by the organization. Such voices not only benefit organizations but also foster innovation enabling employees to enhance their performance dynamically, especially under evolving work conditions. Supporting this perspective, a recent study by Stumpf (2024) adds substance to our findings, revealing that managers perceive and evaluate

favourably those voices that combine organizational focus with instrumental novelty - highlighting the growing recognition of quality over quantity.

Contrarily, we found that employees chose to stay silent on organizational matters, which negatively predict their adaptive performance. Since employees remained silent, it might have become a potential cause for them to experience a loss in their limited self-regulation resources, which over time would lead to a decrease in their adaptive performance. Again, considering the relationship between silence and performance which was still in the early stages (Morrison, 2023; Yang et al., 2024 and Wang et al., 2024b), we believed that in the beginning maintaining frequent silence only affected a person's well-being (Maynes et al., 2024) and over time there was a possibility that it would affect a person's ability to perform well. The evidence provided an interesting insight regarding the relationship between employee silence and adaptive performance, such that the relationship became insignificant after the inclusion of the mediating variable self-regulation depletion. In other words, self-reguation depletion fully explains the relationship between the variables. Past research has shown that when employees experience a loss of cognitive resources, their ability to self-regulate weakens. As a result, they contribute less and are not engaged in their work roles (Li et al., 2019). This was also consistent with our argument that silence on organizational matters, inversely affected performance through self-regulation depletion. We suggest this could be because silence is considered a coping mechanism, and sometimes employees prefer silence even though it may not benefit the organization (Nechanska et al., 2020; Yan et al., 2023). Yet interestingly, our findings revealed that employees were not largely silent at work and experienced lower levels of self-regulation depletion, and as a result, their performance was enhanced.

We have an alternative explanation for these findings. Since we focused on HEIs in Pakistan which are considered a significant part of the service industry, employees always strive to stay ahead of competition, and they are equally supported to speak up and make positive contributions (Jolly and Lee, 2021). We assert that this helped employees to avoid silence at work, which in turn motivated them to perform exceptionally well in a fast-changing work environment, especially in the post covid-19 era that has transformed the way global HEIs function academically. That appears to be a potential reason that faculty members felt highly engaged in their work roles and did not experience substantial depletion in self-regulatory resources, which was associated with positive outcomes.

Overall, our study identified the complex but interesting mediating roles of voice quality and self-regulation depletion in the relationships between perceived impact on the environment and adaptive performance as well as employee silence and adaptive performance respectively – areas that have been less studied in past research. Although empirical evidence partially supported the hypothesized relationships we presented,

it was insightful to understand that employees want to contribute to organizational accomplishments through their valuable work performance.

5.1. Theoretical contribution

The present research advances the literature on employee perceived impact, silence and adaptive performance by clarifying the complex and intricate relationships among them. Our study emphasizes the need to examine performance at the individual employee level, especially at a time when existing literature has relatively focused on team-level performance (see Ficapal-Cusi et al., 2021). This idea adds to the current thinking on self-regulation depletion, which suggests that even psychological depletion can drain employees mental resources and make it difficult for them to perform effectively (Imran et al., 2025).

In particular, this study extends social exchange theory (SET) by introducing voice quality as a mediating construct which enriches our understanding on how employees' perceived impact on their environment can effectively contribute to important outcomes such as adaptive performance. Previous research viewed employee voice as a binary condition where employees either speak up or remain silent, overlooking the key dimensions of voice quality. Addressing this void, our empirical evidence demonstrates that voice quality, rather than voice alone (such as promotive or prohibitive voice in predicting adaptive performance; see Katsaros, 2025), can serve as an underlying mechanism that strengthens the link between employee perceived impact and adaptive performance. This study reconceptualizes the role of voice quality within social exchange theory and provides fresh insights into employees engagement in their work roles. This is particularly significant, as voice quality functions as an employee response mechanism that enables individuals to leverage their perceived impact and link this to their performance. In this way, this is the first study to investigate the combined effect of employees perceived impact on their immediate work environment and their demonstration of effective voice quality on performance.

Moreover, this research advances SET by introducing SRD as a mediator between employee silence and adaptive performance. Previously, research could not explore the emotional and cognitive consequences of silence. For instance, past research has merely identified two models supporting the concept of regulation-depletion: the strength model and the process model. The strength model focused on a person's physical and cognitive limitations; whereas the process model suggested that individuals manage regulation-depletion through emotions rather than merely relying on resources (Tang et al., 2024b). Hence, taking departure from existing research - heavily influenced by self-regulation depletion related theories - our research draws on SET that adequately explains how workplace dynamics can eventually shape employee adaptability. While drawing on SET

framework, we expected that self-regulation depletion can be a significant cost of silence that impairs employees ability to adapt.

5.2. Practical implications

Our study has several implications for all stakeholders of HEI based organizations. First, it will encourage employees to focus on voice quality over voice quantity (Liu, 2022), as high-quality voice not only benefit employees but also organizations operating under tough competitive conditions. Moreover as research on voice has proliferated (Sherf et al., 2021), it is being recognized that higher-ups should pay more attention and give extra weight to voices that consist of rational, feasibility, organizational-focus and novelty. Since an employee's immediate impact on their work environment does not in itself improve their performance, their perception of how high-quality voice input influences performance can enhance it.

Second, it is equally beneficial for senior faculty members, to see if their employees are experiencing depletion of psychological and cognitive resources due to remaining silent at work, because this may have deleterious effects on employees, potentially leading to burnout (Knoll et al., 2019; Parker et al., 2019). Eventually, this may result in a decrease in their work performance. The study has implications for the immediate supervisors to provide purpose-based training to employees and encouragement (Xiang et al., 2024), enabling them to think creatively (Malik et al., 2019) and voice their ideas to benefit the organization.

Third, our research offers different but valuable insights for HEIs in Pakistan to capitalize on the findings of the present study and to adopt approaches that promote out-of-the box thinking among employees, encouraging them to constantly innovate and suggest potential solutions to organizational issues. This mindset not only assists individuals in responding effectively to increasing job-demands without sacrificing their social and personal lives (Imran et al., 2025), but also helps contribute to the overall growth of the organization.

5.3. Limitations and future recommendations

This research has some limitations. First, in response to the call for future research by Bryman and Raver (2021 p. 521), although we measured the full scale of voice quality, we adopted a cross-sectional design instead of a longitudinal design, which could have produced different findings. Thus, in future researchers should use longitudinal or time-lagged studies to examine the difference between quality versus quantity of employee voice when it becomes essential to improve overall service quality (Bitran and Pedrosa, 1998) and to evaluate its larger impact across the organizations. Second, researchers in the future will benefit from studies that investigate the conditions under which the indirect

relationship between perceived impact over environment and adaptive performance can be strengthened or weakened. Therefore we argue that "voice quality belief" can be treated as a moderator in this relationship. This is because employees who believe they do not possess clear solutions or are not well-prepared for a situation are less likely to raise their voice effectively (Zhang et al., 2023). Also consistent with Whiting et al. (2012) arguments, we propose that voice quality belief could potentially affect employees' willingness and confidence to use voice effectively, which may impact their adaptive performance in changing work climate.

Moreover, collecting all information from the same participants was cruical. Diversifying the sample may yield interesting and significant relationships between the study constructs. For instance, future researchers may collect data on employees performance from immediate authorities, such as heads of departments, which may provide more accurate information regarding employee related constructs.

The current research encourages researchers to explore other important facets of employee performance, such as innovative work behavior, creative performance and counterproductive work performance (Carpini et al., 2017), as well as other forms of silence (Xu et al., 2015). From the methodology perspective, it will be prudent to use qualitative methods and study why employees' silence does not directly predict performance in the presence of SRD, especially in complex organizational cultures. Importantly, although our results are consistent with the tenets of SET (Blau, 1964), the current study focused on a relatively narrow group of participants employed in HEIs, which restricts the generalizability of the findings to other sectors of the economy. It is therefore possible that using different sectors or industries could influence the relationship between the study constructs (e.g., Anjum et al., 2022; Omotoyo et al., 2025). Future research may replicate the same setting of variables in sectors like production or manufacturing (Saleem et al., 2024).

In our view, organizations in the manufacturing sector differ in many key aspects. For instance, the work environment does not evolve and change as rapidly as it does in the service sector (e.g., see Yousaf et al., 2022). Employees in manufacturing are traditionally not under constant pressure to contribute to solving organizational problems, a phenomenon that this study identifies as more common in the service sector. Therefore, it would be beneficial to explain how voice quality emerges in the manufacturing sector, which encounter different challenges and problems compared to the service industry (Asghar et al., 2023). It will be interesting to see how employees in the manufacturing sector respond to various stimuli when it comes to expressing quality voice, or at times when employees suffer from ego-depletion (Li et al., 2019; Zheng et al., 2025).

Future research could further explore the study's boundary conditions by examining emotional exhaustion (Zeshan et al., 2024) to investigate the indirect relationship between employee silence and adaptive performance. Moreover, like voice quality,

employee silence is as a multifaceted phenomenon. Therefore, we urge future studies to develop conceptual models incorporating different types of employee silence. For instance, distinguishing between intentional and unintentional silence could offer valuable insights (Nechanska et al., 2020). Moreover, according to a recent meta-analysis on the outcomes of silence, future research could also explore three specific types of silence: acquiescent silence, defensive silence, as well as prosocial silence (Hao et al., 2022).

Authors' contribution

M.M.A.: article conception, research methods applied, conducting the research, data collection, analysis and interpretation of results, draft manuscript preparation. **A.O.:** theoretical content of the article, conducting the research, data collection, analysis and interpretation of results. **M.Z.M.:** conducting the research, analysis and interpretation of results. **N.S.:** research methods applied, draft manuscript preparation.

Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work the authors did not use Generative AI and AI-assisted technologies in the writing process.

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