

Time Management Behavior as a Moderator of the Relationship Between Job Confidence and Employee Voice Behavior

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Abstract

Employee voice behavior—a critical driver of organizational improvement and innovation—is increasingly recognized as contingent upon employees' psychological resources and behavioral capacities. The present study examined whether time management behavior moderates the relationship between job confidence and employee voice behavior among Pakistani employees. A quantitative cross-sectional design was employed, with data collected privately from select private sector organizations, including S2S Marketing, AH Group of Companies, and H MAC Group of Companies, as well as a broader convenience sample of 300 employees (237 males, 63 females) across multiple cities and organizational sectors in Pakistan. Three validated instruments were used: the Job Confidence Scale (JCS; 6 items; $\alpha = .831$), the Time Management Behavior Scale (TMBS; 10 items; $\alpha = .841$), and the Employee Voice Behavior Scale (EVBS; 6 items; $\alpha = .824$). Hierarchical moderated multiple regression analyses revealed that job confidence significantly predicted employee voice behavior ($\beta = .44, p < .001$). Time management behavior also demonstrated a significant direct association with employee voice behavior ($\beta = .31, p < .001$). Critically, the interaction term (job confidence $\times$ time management behavior) was statistically significant ($\beta = .35, t = 6.46, p < .001$), accounting for an additional 9.1% of variance in employee voice behavior ($\Delta R^2 = .091, \Delta F = 41.78, p < .001$). Simple slopes analysis confirmed that the positive relationship between job confidence and employee voice behavior was stronger at high levels of time management behavior ($\beta = .52, p < .001$) compared to low levels ($\beta = .22, p < .01$). Common method variance was assessed using Harman's single-factor test, which indicated that a single factor accounted for only 31.4% of the variance, below the 50% threshold. These findings support the hypothesis that the positive relationship between job confidence and employee voice behavior is amplified when time management behavior is high. Implications for organizational psychology, human resource development, and workplace interventions in the Pakistani context are discussed.

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Introduction

In contemporary organizational environments characterized by rapid change, competitive pressures, and evolving workforce dynamics, the psychological and behavioral antecedents of employee performance have gained considerable scholarly attention. Among the behavioral outcomes relevant to organizational effectiveness, employee voice behavior—defined as the discretionary expression of constructive ideas, concerns, and suggestions intended to improve organizational functioning—has emerged as a pivotal indicator of organizational health and adaptability (Morrison, 2014; Van Dyne & LePine, 1998). However, speaking up in the workplace is not a simple or automatic behavior; it is shaped by complex interactions among

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individual-level psychological resources, dispositional attributes, and behavioral competencies. Understanding the psychological mechanisms that facilitate or constrain voice behavior is therefore of substantial theoretical and applied importance (Detert & Burris, 2007). The present study addresses this imperative by investigating the moderating role of time management behavior in the relationship between job confidence and employee voice behavior.

Employee voice behavior encompasses a broad constellation of constructive, change-oriented communication behaviors through which employees express work-related opinions, concerns, and suggestions to those in positions to act on them (Morrison, 2014; Liang et al., 2012). The foundational conceptualization of voice by Van Dyne and LePine (1998) distinguished it from compliant or passive behavioral patterns, framing voice as an extra-role, change-oriented act that carries inherent interpersonal risk. Morrison (2014) subsequently elaborated a dual typology, identifying promotive voice—proactive suggestions for improvement—and prohibitive voice—the raising of concerns about potentially harmful practices—as functionally distinct yet conceptually related dimensions of the broader voice construct. Both forms require that employees perceive the organizational environment as sufficiently safe and receptive, and that they themselves possess the psychological readiness to engage in what is inherently a risk-bearing communicative act (Edmondson, 1999). Empirical research consistently demonstrates that employee voice is facilitated by individual-level psychological resources (e.g., self-efficacy, psychological safety) and organizational conditions (e.g., leader-member exchange, perceived organizational support), while being inhibited by fear of negative evaluation, high power distance, and organizational silence norms (Edmondson, 1999; Milliken et al., 2003; Morrison, 2014; Wu et al., 2020).

In the Pakistani organizational context, characterized by pronounced hierarchical structures and authority-deferential cultural norms, the barriers to employee voice may be especially pronounced, making the identification of enabling psychological and behavioral antecedents a matter of considerable practical urgency (Noor et al., 2017; Shahzad & Malik, 2019). Research on Pakistani workplaces has highlighted the coexistence of high power distance and emerging pressures toward democratized management practices, particularly in private sector and NGO contexts (Noor et al., 2017). Within such environments, employees must navigate complex authority relationships while simultaneously discerning when and how to articulate constructive input—a process that requires not only the psychological willingness to speak but also the practical capacity to do so effectively. Understanding the factors that enable voice behavior in these contexts is therefore both theoretically and practically significant.

Job Confidence as a Psychological Antecedent of Voice Behavior

Job confidence, the first key variable in this study, refers to an individual's belief in their own competence, capability, and effectiveness in performing job-related tasks and roles (Bandura, 1997; Judge et al., 2007). Rooted in Bandura's (1997) social cognitive theory, job confidence is conceptually related to but distinct from general self-efficacy, as it pertains specifically to occupational contexts and role-relevant performance expectations. Distinguished from domain-general self-efficacy by its occupational specificity, job confidence shapes the manner in which employees interpret performance demands, allocate effort, and respond to organizational challenges. Employees with high job confidence tend to approach work

challenges with persistence, optimism, and proactive engagement, perceiving themselves as capable contributors rather than passive recipients of organizational directives.

Empirical research consistently demonstrates that job confidence is positively associated with a range of proactive work behaviors, including initiative-taking, organizational citizenship behavior, and creative performance (Parker et al., 2010; Spreitzer, 1995). Employees high in job confidence are theorized to approach work proactively, with greater persistence and willingness to engage in discretionary behaviors that carry the risk of negative evaluation—qualities directly implicated in voice behavior (Parker et al., 2010; Spreitzer, 1995). Specifically within the voice literature, confidence has been identified as a crucial psychological prerequisite for speaking up, as employees must believe their contributions will be consequential and that they possess the credibility to make them (Liang et al., 2012; Morrison & Milliken, 2000). Studies conducted across diverse organizational contexts confirm that employees low in job confidence tend to engage in silence behaviors, withholding potentially valuable input due to fears of incompetence attribution or negative evaluation (Milliken et al., 2003). Liang et al. (2012) demonstrated that efficacy-related beliefs were among the strongest predictors of both promotive and prohibitive voice across multiple organizational samples, reinforcing the centrality of confidence-based constructs to voice behavior theory. The present investigation extends this line of inquiry by examining job confidence not merely as a direct predictor, but as a motivational resource whose expression in voice behavior may be conditioned by co-occurring behavioral competencies.

Time Management Behavior as a Behavioral Competency

Time management behavior, the proposed moderator in the current study, refers to the systematic application of goal-setting, priority structuring, scheduling, and self-regulatory strategies to optimize the allocation of time toward productive task engagement (Macan, 1994; Claessens et al., 2007). Conceptually grounded in Macan's (1994) process model of time management, time management behavior encompasses both cognitive (planning and goal-setting) and behavioral (scheduling and monitoring) dimensions, collectively enabling individuals to exercise greater control over their temporal environment. Macan's (1994) process model conceptualizes time management behavior as a multidimensional construct that operates through perceived control over time—a mediating mechanism through which deliberate temporal self-regulation reduces strain and enhances occupational performance.

Research demonstrates that effective time management behavior is associated with reduced work-related stress, enhanced job satisfaction, improved academic and occupational performance, and greater psychological well-being (Aeon & Aguinis, 2017; Adams & Jex, 1999; Claessens et al., 2007). Claessens et al.'s (2007) comprehensive review of the time management literature confirmed robust positive associations between time management behavior and indicators of job performance, job satisfaction, and reduced occupational stress, while also noting that the effects of time management are likely moderated by individual and contextual variables. More recent meta-analytic evidence by Aeon and Aguinis (2017) demonstrated that time management exerts a meaningful positive influence on both subjective well-being and objective performance, and that its impact is particularly pronounced in high-demand work environments. Within organizational psychology, time management behavior has been theorized as a self-regulatory resource that enables employees to transform

motivational states into purposeful action by reducing temporal uncertainty and creating space for discretionary engagement (Adams & Jex, 1999).

In the context of voice behavior, time management behavior may serve as an enabling resource that translates confidence-based motivation into overt communicative action. Employees who manage their time effectively are better positioned to reflect on organizational processes, identify areas for improvement, and carve out the cognitive and temporal space necessary to formulate and communicate suggestions—processes that are cognitively demanding and require deliberate effort (Morrison, 2014). By providing individuals with the self-regulatory infrastructure to convert intentions into behaviors, time management may therefore function as a boundary condition that amplifies the confidence-voice relationship. Despite this theoretical relevance, the role of time management behavior as a boundary condition in the relationship between psychological resources and proactive organizational behaviors—including employee voice—has not been empirically examined, representing the specific gap the present study is designed to address.

Theoretical Integration: A Moderation Framework

The integration of job confidence and time management behavior within a unified moderation framework draws upon Parker et al.'s (2010) proactive motivation model, which posits that proactive behavior requires not only motivational antecedents—the "can do," "reason to," and "energized to" states—but also behavioral competencies that enable the translation of motivation into observable action. This theoretical architecture is particularly relevant to the present investigation because it provides a coherent explanatory mechanism for understanding why the relationship between job confidence and employee voice behavior may not be uniform across all employees, but rather contingent upon the presence of co-occurring behavioral capacities that facilitate the enactment of voice intentions.

Job confidence, within this framework, represents a motivational resource aligned with the "can do" component of proactive motivation. Rooted in Bandura's (1997) social cognitive theory, job confidence provides employees with the sense of occupational credibility, competence, and perceived legitimacy necessary to consider voice a viable and worthwhile act. Employees who possess strong beliefs in their professional capabilities are more likely to interpret voice opportunities as within their reach and to perceive their contributions as potentially consequential (Liang et al., 2012; Morrison & Milliken, 2000). However, the possession of confidence-based motivation, while necessary, may be insufficient to ensure that employees actually engage in voice behavior. The translation of motivational states into overt action requires additional behavioral competencies that structure the enactment process and provide the practical capacity to follow through on voice intentions (Parker et al., 2010). This distinction between motivation and behavioral competency is central to the theoretical logic of the present study.

Time management behavior, by contrast, represents an action-enabling competency that operates through a distinct yet complementary mechanism. Conceptually grounded in Macan's (1994) process model, time management behavior encompasses the systematic application of goal-setting, planning, prioritization, and scheduling strategies that collectively enable individuals to exercise greater control over their temporal environment. Within the proactive motivation framework, time management behavior functions as a behavioral

competency that structures temporal resources, reduces cognitive overload, and provides the deliberate space required for constructive organizational communication (Claessens et al., 2007). Employees who manage their time effectively are better positioned to reflect on organizational processes, identify areas for improvement, and carve out the cognitive and temporal space necessary to formulate and communicate suggestions—processes that are cognitively demanding and require deliberate effort (Morrison, 2014). By providing individuals with the self-regulatory infrastructure to convert intentions into behaviors, time management may therefore function as a boundary condition that amplifies the confidence-voice relationship.

The formal logic of moderated regression, as articulated by Baron and Kenny (1986) and subsequently elaborated by Hayes (2018), establishes that the effect of a predictor on an outcome may be strengthened, attenuated, or directionally reversed depending on the level of a third moderating variable. Applying this framework to the confidence-voice relationship, it may be hypothesized that time management behavior functions as a behavioral amplifier: employees who are high in both job confidence and time management behavior are uniquely positioned to recognize opportunities for voice, formulate substantive contributions, and follow through on voice intentions—processes that require not only the psychological willingness to speak up, but also the practical organizational capacity to do so effectively. This interpretation is broadly consistent with the constraints model of proactive behavior advanced by Wu et al. (2020), which argues that contextual and individual-level constraints moderate the expression of proactively motivated behavior. The theoretical integration of these constructs yields a coherent moderation model in which job confidence provides the motivational impetus for voice—the psychological willingness and perceived legitimacy to speak up—while time management behavior provides the behavioral infrastructure and cognitive capacity to translate that motivation into overt action. In this sense, confidence and time management behavior are not merely additive contributors to voice; rather, they interact synergistically, with each amplifying the potential of the other. This theoretically derived hypothesis is the central focus of the empirical investigation reported in the present study.

Rationale for the Present Study

Despite the well-established individual associations between job confidence and employee voice behavior, and between time management behavior and various work outcomes, no published study to the authors' knowledge has examined time management behavior as a moderator in the confidence-voice relationship. This constitutes a significant theoretical gap, as moderation-focused inquiry is essential for delineating the boundary conditions under which psychological resources translate into behavioral outcomes (Baron & Kenny, 1986; Hayes, 2018). The absence of empirical attention to this particular moderation effect is surprising given the theoretical plausibility of the relationship and its potential practical implications for organizational intervention. The current study addresses this gap in several important respects.

First, the present study integrates self-efficacy theory, proactive motivation theory, and time management research within a unified moderation framework, advancing theoretical understanding of how motivational states interact with behavioral competencies to produce organizational outcomes. While prior research has established that job confidence predicts voice behavior (Liang et al., 2012; Morrison, 2014) and that time management behavior is

associated with various performance outcomes (Aeon & Aguinis, 2017; Claessens et al., 2007), these literatures have developed largely in isolation from one another. By bringing them into theoretical conversation, the present study offers a more comprehensive account of the psychological and behavioral antecedents of voice behavior, one that recognizes the interdependence of motivational and competency-based factors in shaping proactive organizational behavior. Second, the study addresses the paucity of organizational psychological research in the Pakistani context, where hierarchical structures, cultural norms around authority, and sector-specific constraints may differentially moderate the confidence-voice relationship in ways not yet captured by Western-centric research. Research on Pakistani workplaces has highlighted the coexistence of high power distance and emerging pressures toward democratized management practices, particularly in private sector and NGO contexts (Noor et al., 2017). In such environments, employees must navigate complex authority relationships while simultaneously discerning when and how to articulate constructive input—a process that requires not only the psychological willingness to speak but also the practical capacity to do so effectively. Understanding the factors that enable voice behavior in these contexts is therefore both theoretically and practically significant. The present study responds to calls for more contextually grounded research on employee voice (Morrison, 2014) by examining the confidence-voice relationship within a sample of Pakistani employees drawn from multiple organizational sectors and geographic locations. Third, the findings carry direct practical implications for human resource development and organizational intervention. Organizations seeking to promote employee voice—particularly in high-stakes contexts where upward communication is critical for safety, innovation, or quality improvement—may find value not only in interventions aimed at enhancing employee confidence, but also in training programs designed to strengthen time management skills. The present moderation findings suggest that investing in time management development may be especially impactful for employees already high in job confidence, as such training may unlock latent voice potential that motivational resources alone cannot activate. This dual-pronged approach to voice promotion—targeting both psychological resources and behavioral competencies—represents a novel contribution to evidence-based human resource practice.

Taken together, these theoretical, contextual, and practical considerations establish a compelling rationale for the present investigation. By examining time management behavior as a moderator of the job confidence–employee voice behavior relationship, the study advances theoretical understanding, addresses contextual gaps in the literature, and provides actionable insights for organizational practice. The specific objectives and hypotheses that guide this investigation are formally stated below.

Objectives

The objectives of the present study were as follows:

1. To examine the direct relationship between job confidence and employee voice behavior;
2. To examine the direct relationship between time management behavior and employee voice behavior;
3. To determine whether time management behavior moderates the relationship between job confidence and employee voice behavior, such that the relationship is stronger at higher levels of time management behavior.

Hypotheses

1. Job confidence will be positively and significantly associated with employee voice behavior.
2. Time management behavior will be positively and significantly associated with employee voice behavior.
3. Time management behavior will moderate the relationship between job confidence and employee voice behavior, such that the positive relationship between job confidence and employee voice behavior will be stronger when time management behavior is high.

Methodology

Sample

The sample comprised 300 employees recruited from various organizational sectors across major cities in Pakistan. The sample included 237 males (79%) and 63 females (21%). Participants ranged in age from 22 to 54 years ($M = 38.13$, $SD = 9.96$). Years of work experience ranged from 1 to 24 years ($M = 12.51$, $SD = 6.88$). With respect to educational attainment, 97 participants (32.3%) held bachelor's degrees, 120 (40%) held master's degrees, 56 (18.7%) held MS/MPhil degrees, and 27 (9%) held doctoral degrees. The sample was drawn from private sector organizations ($n = 173$, 57.7%), including S2S Marketing, AH Group of Companies, and H MAC Group of Companies, from which data were collected privately, as well as public sector organizations ($n = 98$, 32.7%), and NGOs/INGOs ($n = 29$, 9.7%). Participants were recruited from Karachi ($n = 6$), Islamabad ($n = 8$), Lahore ($n = 2$), Faisalabad ($n = 6$), Multan ($n = 5$), Gujranwala ($n = 4$), Peshawar ($n = 254$), Quetta ($n = 4$), Sialkot ($n = 5$) and Rawalpindi ($n = 6$). The geographic concentration of the sample in Peshawar reflects the recruitment network accessible to the researchers and the concentration of organizational contacts in that region; this limitation is acknowledged in the discussion.

Sampling Technique

A non-probability convenience sampling technique was employed to recruit participants. Convenience sampling is widely used in organizational research when population-level sampling frames are unavailable or impractical (Saunders et al., 2019). Participants were approached through professional networks, organizational contacts, and online platforms. Although convenience sampling limits generalizability, the diverse geographic and sector representation of the sample partially mitigates this concern.

Instruments

Job Confidence Scale: Job confidence was assessed using the Job Confidence Scale (JCS; Parker, 1998), a 6-item self-report measure designed to assess employees' beliefs in their capability to perform job-relevant tasks effectively. Items were rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicate greater job confidence. The scale has demonstrated adequate reliability and validity in prior organizational research (Parker et al., 2010). In the present sample, internal consistency was excellent ($\alpha = .831$).

Time Management Behavior Scale: Time management behavior was measured using the Time Management Behavior Scale (TMBS; Macan et al., 1990), a 10-item instrument assessing goal-setting, planning, prioritization, and perceived control over time. Items are rated on a 5-point Likert scale (1 = not at all, 5 = always). The TMBS has been extensively

validated across occupational and academic samples (Macan, 1994; Claessens et al., 2007). Internal consistency in the current sample was excellent ($\alpha = .841$).

Employee Voice Behavior Scale: Employee voice behavior was measured using a 6-item Employee Voice Behavior Scale adapted from Van Dyne and LePine (1998), with items capturing both promotive and prohibitive voice dimensions. Items were rated on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). Higher scores reflect greater frequency and intensity of voice behavior. This scale has been validated extensively in organizational settings, demonstrating robust psychometric properties (Liang et al., 2012; Morrison, 2014). Internal consistency in the present study was excellent ($\alpha = .824$).

Procedure Data were collected through an online survey administered via Google Forms. Prior to participation, all respondents were provided with an informed consent form clearly explaining the purpose of the study, the voluntary nature of participation, their right to withdraw at any time without consequence, and the assurance of strict data confidentiality. No identifying information was collected. The questionnaire packet included demographic items followed by the three scales in counterbalanced order to mitigate order effects. Participants were instructed to respond based on their current job situation and typical work behaviors. The study protocol adhered to ethical standards for research involving human participants, consistent with the principles outlined in the Declaration of Helsinki. Data collection was completed over a period of approximately three months.

Data Analysis Strategy Data were analyzed using SPSS version 26. Prior to hypothesis testing, data were screened for missing values, outliers, and normality. Descriptive statistics and Pearson correlations were computed for all study variables. Hierarchical moderated multiple regression was employed to test the hypotheses, with employee voice behavior as the dependent variable. In Step 1, job confidence was entered as a predictor. In Step 2, time management behavior was added. In Step 3, the interaction term (job confidence $\times$ time management behavior) was entered. All predictors were mean-centered prior to forming the interaction term to reduce multicollinearity and facilitate interpretation of the interaction effect (Aiken & West, 1991). Simple slopes analysis was conducted to examine the effect of job confidence on voice behavior at low (-1 SD), medium (mean), and high ($+1$ SD) levels of time management behavior. Common method variance was assessed using Harman's single-factor test.

RESULTS

Preliminary Analyses Prior to hypothesis testing, data were screened for missing values, outliers, and normality. No missing values were identified. Outliers were examined using standardized residuals and Cook's distance; no influential cases were identified. Skewness and kurtosis values for all study variables were within acceptable ranges (skewness $< |2|$, kurtosis $< |7|$), indicating approximately normal distributions (Table 2). Multicollinearity was assessed using variance inflation factors (VIFs); all VIFs were below 2.0, indicating no multicollinearity concerns. Harman's single-factor test was conducted to assess common method variance. All items from the three scales were subjected to an exploratory factor analysis. The first unrotated factor accounted for 31.4% of the variance, which is below the 50% threshold, suggesting that common method variance is not a significant concern in this study (Podsakoff et al., 2003).

Table 1

Demographic Characteristics of the Sample (N = 300)

Variable	Category	N	%
Gender	Male	237	79.0
	Female	63	21.0
Education	Bachelor's	97	32.3
	Master's	120	40.0
	MS/MPhil	56	18.7
	PhD	27	9.0
Sector	Private	173	57.7
	Public	98	32.7
	NGO/INGO	29	9.7

Note. Age: M = 38.13, SD = 9.96, range = 22–54. Work Experience: M = 12.51 years, SD = 6.88.

Table 2**Reliability and Descriptive Statistics for Study Variables (N = 300)**

Variable	Items	α	M	SD	Min	Max	Skewness	Kurtosis
Job Confidence	6	.831	2.96	0.56	1.50	4.50	0.21	-0.14
Time Management Behavior	10	.841	3.01	0.49	1.70	4.40	0.17	-0.09
Employee Voice Behavior	6	.824	3.75	0.77	1.67	6.83	-0.08	0.32

Note. α = Cronbach's alpha; M = mean; SD = standard deviation. All alpha values exceed the conventional threshold of .70 (Nunnally, 1978). Skewness and kurtosis values indicate approximately normal distributions.

Cronbach's alpha coefficients for all three scales exceeded the .70 threshold recommended by Nunnally (1978), indicating acceptable to good internal consistency. Descriptive statistics indicated moderate mean levels across all three constructs, with employee voice behavior exhibiting the greatest variance (SD = 0.77).

Table 3**Pearson Intercorrelations Among Study Variables (N = 300)**

Variable	1	2	3
1. Job Confidence	—		
2. Time Management Behavior	.39**	—	
3. Employee Voice Behavior			—

3. Employee Voice Behavior	.44**	.41**	—
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Note. ** $p < .001$ (two-tailed).

The correlation matrix revealed significant positive associations among all study variables. Job confidence was positively correlated with employee voice behavior ($r = .44$, $p < .001$), supporting H1. Time management behavior was also positively correlated with employee voice behavior ($r = .41$, $p < .001$), supporting H2. Job confidence and time management behavior were significantly correlated ($r = .39$, $p < .001$), indicating a moderate relationship between the two predictors.

Hypothesis Testing Hierarchical moderated multiple regression was conducted to test the hypotheses. In Step 1, job confidence significantly predicted employee voice behavior ($B = 0.61$, $SE = 0.07$, $\beta = .44$, $t = 8.46$, $p < .001$), accounting for 19.4% of the variance ($R^2 = .194$, $F[1, 298] = 71.58$, $p < .001$), thereby supporting H1. In Step 2, both job confidence ($\beta = .31$, $p < .001$) and time management behavior ($\beta = .31$, $p < .001$) significantly predicted employee voice behavior, with the model explaining an additional 6.7% of variance ($\Delta R^2 = .067$, $\Delta F = 27.13$, $p < .001$), supporting H2. In Step 3, the addition of the mean-centered interaction term ($JC \times TMB$) produced a statistically significant increment in explained variance ($\Delta R^2 = .091$, $\Delta F = 41.78$, $p < .001$). The interaction term was significant ($B = 0.72$, $SE = 0.11$, $\beta = .35$, $t = 6.46$, $p < .001$), indicating that time management behavior significantly moderates the relationship between job confidence and employee voice behavior. The overall model accounted for 35.2% of the variance in employee voice behavior ($R^2 = .352$, $F[3, 296] = 53.64$, $p < .001$). H3 was fully supported.

Table 4

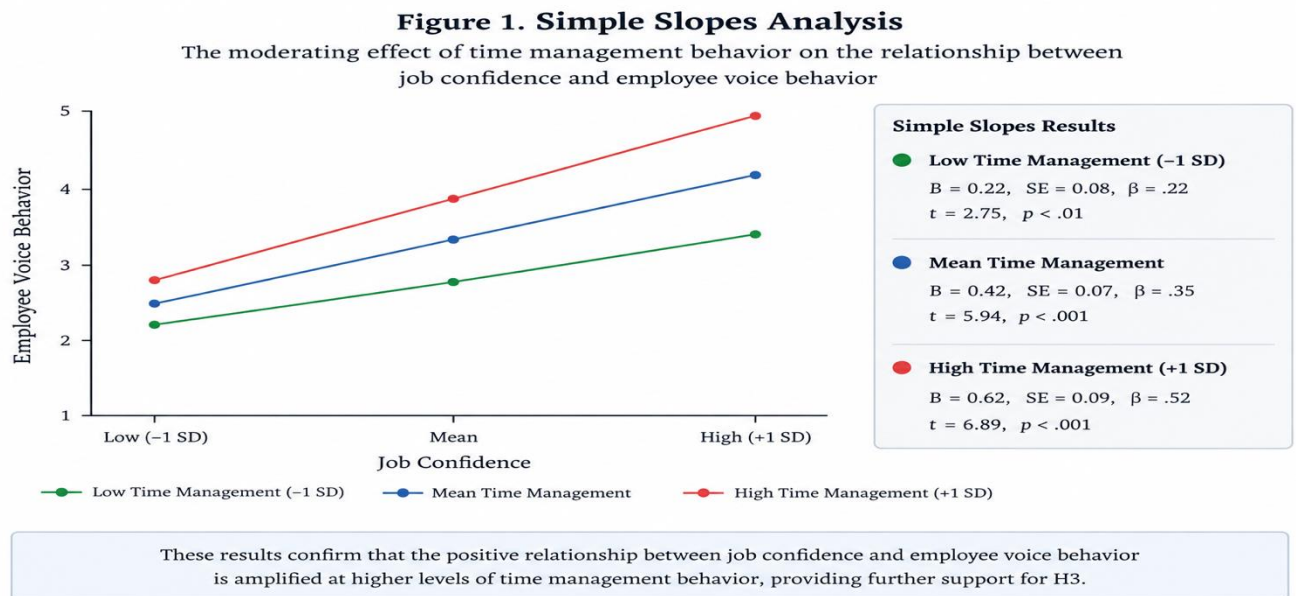
Hierarchical Moderated Regression Analysis Predicting Employee Voice Behavior ($N = 300$)

Predictor	B	SE	B	t	P
Step 1					
Job Confidence (JC)	0.61	0.07	.44	8.46	< .001
$R^2 = .194$, $F(1, 298) = 71.58$, $p < .001$					
Step 2					
Job Confidence (centered)	0.42	0.07	.31	5.94	< .001
Time Management (centered)	0.49	0.08	.31	6.10	< .001
$R^2 = .261$, $\Delta R^2 = .067$, $\Delta F = 27.13$, $p < .001$					
Step 3					
Job Confidence (centered)	0.42	0.07	.31	5.94	< .001
Time Management (centered)	0.49	0.08	.31	6.10	< .001

JC × Time Management (Interaction)	0.72	0.11	.35	6.46	< .001
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$R^2 = .352$, $\Delta R^2 = .091$, $\Delta F = 41.78$, $p < .001$

Note. Outcome variable = Employee Voice Behavior. B = unstandardized coefficient; SE = standard error; β = standardized coefficient. All predictors were mean-centered prior to forming the interaction term. Total model $R^2 = .352$, $F(3, 296) = 53.64$, $p < .001$.



Discussion

The present study examined the moderating role of time management behavior in the relationship between job confidence and employee voice behavior among a sample of 300 Pakistani employees. The findings provide robust empirical support for all three study hypotheses and offer several theoretically and practically significant contributions to the organizational psychology literature. The discussion that follows interprets these findings in light of existing empirical evidence, contextualizes them within the Pakistani organizational landscape, acknowledges methodological limitations, and outlines directions for future research and practical intervention.

The Direct Effect of Job Confidence on Employee Voice Behavior

The direct positive relationship between job confidence and employee voice behavior, as hypothesized and confirmed in the present study ($\beta = .44$, $p < .001$), is consistent with a substantial body of organizational psychological literature linking confidence-related constructs to proactive work behaviors. From the perspective of Bandura's (1997) social cognitive theory, individuals who possess strong beliefs in their occupational competence are more likely to initiate and sustain effortful communicative behaviors, including voicing concerns and suggestions. This finding aligns with the work of Parker et al. (2010), who demonstrated that role breadth self-efficacy—a closely related construct—was a robust predictor of proactive performance behaviors across multiple organizational samples.

The present finding also resonates with Morrison and Milliken's (2000) theoretical account of organizational silence, which positions low confidence as a key driver of voice inhibition. Employees who doubt their occupational credibility are more likely to self-censor, withholding potentially valuable input due to fears of incompetence attribution or negative evaluation (Milliken et al., 2003). In the Pakistani organizational context, where hierarchical authority relations are deeply entrenched and power distance remains pronounced (Noor et al., 2017), the willingness to speak up may indeed require a heightened sense of personal confidence and credibility. Employees who question their expertise or standing may refrain from voice not merely because of normative pressures but because they genuinely doubt whether their input carries sufficient weight to be worthy of expression—a dynamic well-captured by Milliken et al.'s (2003) analysis of the psychological costs of speaking up. Recent meta-analytic evidence has further confirmed that authoritarian leadership and abusive supervision suppress employee voice through cognitive and resource mechanisms, including reduced psychological safety and voice efficacy (Xu et al., 2021). These findings collectively reinforce the centrality of confidence-based constructs to voice behavior theory and underscore the importance of psychological resources in enabling upward communication.

The Direct Effect of Time Management Behavior on Employee Voice Behavior

The significant positive direct relationship between time management behavior and employee voice behavior ($\beta = .31, p < .001$) extends prior research on time management by demonstrating its relevance not only for performance and well-being outcomes but also for proactive communicative behavior. Macan's (1994) process model posits that time management behavior reduces strain and enhances job satisfaction through its effect on perceived control over time. The present findings suggest an additional pathway: by enabling employees to allocate cognitive and temporal resources more efficiently, effective time management behavior may create the psychological capacity and practical opportunity to engage in discretionary organizational behaviors such as voice. This reasoning is consistent with Aeon and Aguinis's (2017) meta-analytic review, which documented robust positive associations between time management and both subjective and objective performance indicators. It also aligns with Adams and Jex's (1999) finding that time management predicted reduced work-family conflict—a finding that implies greater availability of motivational resources for organizational engagement. Recent systematic reviews have further confirmed that structured behaviors such as planning, prioritization, and goal-setting are consistently linked to academic and professional success, as well as improved well-being (Claessens et al., 2007). In the Pakistani organizational context, where workload pressures and role overload are widely reported (Shahzad & Malik, 2019), effective time management may be especially valuable as a means of creating the discretionary bandwidth necessary for voice. Employees who manage their time effectively are better positioned to reflect on organizational processes, identify areas for improvement, and carve out the cognitive space required to formulate and communicate substantive suggestions.

The Moderating Role of Time Management Behavior

The central and most theoretically significant finding of the present study is the confirmation of time management behavior as a significant positive moderator of the job confidence–voice behavior relationship ($B = 0.72, \beta = .35, t = 6.46, p < .001, \Delta R^2 = .091$). This finding indicates that the confidence–voice relationship is not uniformly strong but is specifically amplified

when employees also possess high levels of time management competency. The interaction term alone accounted for approximately 9.1% of incremental variance in voice behavior—a meaningful effect size that compares favorably with typical moderation effects in field research (Aguinis et al., 2005).

This moderation pattern is theoretically interpretable within a resource-capacity framework. Whereas job confidence provides the motivational impetus to engage in voice—the psychological willingness and perceived legitimacy to speak up—time management behavior provides the behavioral infrastructure and cognitive capacity to translate that motivation into overt action. In this sense, confidence and time management behavior are not merely additive contributors to voice; rather, they interact synergistically, with each amplifying the potential of the other. This finding contributes to the broader proactive motivation literature (Parker et al., 2010), which emphasizes that proactive behavior requires not only the desire to act but also the behavioral competencies that enable successful execution.

The simple slopes analysis provided further insight into the nature of the moderation effect. At low levels of time management behavior, job confidence was significantly positively associated with voice behavior ($\beta = .22, p < .01$). At mean levels, the relationship was stronger ($\beta = .35, p < .001$), and at high levels, the relationship was strongest ($\beta = .52, p < .001$). This pattern indicates that while confidence is positively associated with voice at all levels of time management, the strength of this relationship increases substantially as time management competency increases. Employees who are both confident and temporally organized are uniquely positioned to recognize voice opportunities, formulate substantive contributions, and follow through on voice intentions—processes that require not only the psychological willingness to speak up but also the practical organizational capacity to do so effectively. The observed moderation effect is particularly noteworthy when interpreted through the lens of the constraints model of proactive behavior. Wu et al. (2020) argued that contextual and individual-level constraints moderate the expression of proactively motivated behavior. In organizational environments characterized by hierarchical structures and limited opportunities for spontaneous upward communication, confidence alone—while necessary—may be insufficient to overcome the logistical and situational constraints on voice. The additionally required competency of organizing one's time and priorities to engage in proactive behavior may explain why the confidence–voice relationship is substantially stronger among high time managers.

Contextual Analysis: Voice Behavior in the Pakistani Organizational Context

These findings have important implications when interpreted in light of the broader organizational culture of Pakistan. Research on Pakistani workplaces has highlighted the coexistence of high power distance and emerging pressures toward democratized management practices, particularly in private sector and NGO contexts (Noor et al., 2017). The present sample, drawn from multiple sectors and cities, reflects this heterogeneity. The significant role of time management behavior in amplifying the confidence–voice relationship may be particularly relevant in contexts where organizational structures create barriers to spontaneous voice and where employees must strategically plan and time their communicative contributions.

Recent research on Pakistani SMEs has emphasized the importance of employee voice for innovation and organizational adaptability, particularly in the context of the China-Pakistan

Economic Corridor (CPEC), which has introduced transformative changes to the business landscape (Shahzad et al., 2021). Transformational leadership has been identified as a key enabler of employee voice in these contexts, with voice serving as a critical pathway through which leadership influences innovation performance (Naeem et al., 2021). Similarly, servant leadership has been shown to promote employee voice in Pakistani SMEs through the mediating mechanism of trust in leaders (Khan et al., 2021). These findings collectively suggest that leadership behaviors and organizational conditions play a crucial role in shaping voice behavior in the Pakistani context, complementing the individual-level psychological and behavioral factors examined in the present study.

The present findings also address a significant gap in the organizational psychology literature regarding the generalizability of findings beyond Western, Educated, Industrialized, Rich, and Democratic (WEIRD) samples. Research has shown that organizational behavior research has historically over-relied on WEIRD samples, with a substantial proportion of studies failing to even report the country in which data were collected (Thalmayer et al., 2021). This lack of attention to sample characteristics and contextual factors hampers theory development by reducing the focus on boundary conditions and limiting the applicability of findings to non-Western contexts (Henrich et al., 2010). By examining the confidence–voice relationship within a Pakistani sample, the present study contributes to a more inclusive and contextually grounded understanding of employee voice behavior. The findings suggest that while the fundamental psychological processes linking confidence to voice may be universal, the expression of these processes is shaped by cultural and contextual factors—including the availability of temporal resources and the strategic necessity of planning communicative contributions in hierarchical environments.

Practical Implications

From a practical standpoint, the findings carry direct implications for human resource development and organizational intervention. Organizations seeking to promote employee voice—particularly in high-stakes contexts where upward communication is critical for safety, innovation, or quality improvement—may benefit from a two-pronged approach targeting both job confidence and time management competencies.

First, confidence-enhancement interventions, including strengths-based coaching, performance feedback, and mastery experiences (Bandura, 1997), can help employees develop the psychological resources necessary to perceive voice as a viable and worthwhile act. Such interventions may be particularly important in hierarchical organizational contexts where employees may otherwise doubt the value of their contributions. Research on voice in Pakistani SMEs has demonstrated that leadership behaviors that build trust and psychological safety can significantly enhance employees' willingness to speak up (Khan et al., 2021). Training programs that target these leadership competencies may therefore complement individual-level confidence-building efforts. Second, time management training programs that equip employees with planning, prioritization, and scheduling skills can provide the behavioral infrastructure necessary to translate confidence-based motivation into overt voice behavior. The present moderation findings suggest that investing in time management development may be especially impactful for employees already high in job confidence, as such training may unlock latent voice potential that motivational resources alone cannot activate. Organizations may consider integrating time management modules into existing

professional development curricula, particularly for employees in roles that require substantial proactive communication.

The practical significance of these findings is underscored by evidence that employee voice is a significant driver of organizational innovation and performance. Research has shown that organizations promoting open communication experience up to 87% improved outcomes in decision-making as a result of collective intelligence, and that employee empowerment is 4.6 times higher when employees feel heard (Deloitte, 2023). Furthermore, employee voice has been linked to reduced turnover rates, saving costs estimated at 50% to 200% of annual salary per replaced employee (Gallup, 2023). These organizational benefits highlight the strategic importance of investing in both confidence-building and time management development as means of unlocking employee voice potential.

Limitations and Suggestions for Future Research

Several methodological limitations should be acknowledged when interpreting the findings of this study, and these limitations point directly to productive avenues for future inquiry. First, the cross-sectional design precludes causal inferences regarding the relationships among job confidence, time management behavior, and employee voice behavior. While the theoretical framework posits that job confidence and time management behavior predict voice behavior, the possibility of reverse causality or reciprocal relationships cannot be ruled out. Longitudinal research employing cross-lagged panel designs or experience-sampling methodologies is therefore needed to establish directional effects and temporal dynamics—for example, whether voice behavior leads to increased confidence through successful mastery experiences, or whether confidence primarily drives voice behavior as the present framework suggests. Second, the use of convenience sampling limits the generalizability of findings to the broader population of Pakistani employees. Although the sample was diverse in terms of geographic location and organizational sector, the non-probability sampling technique may have introduced selection biases. The substantial overrepresentation of male participants (79%) is particularly concerning, as it may constrain the applicability of findings to female employees, who may experience voice behavior barriers differently. Additionally, the geographic concentration of the sample in Peshawar (84.7%) raises questions about whether the findings reflect organizational dynamics specific to that region rather than Pakistan more broadly. Future research should therefore employ stratified random sampling techniques and ensure adequate representation of female employees and diverse geographic regions to examine potential gender and regional differences in the confidence–voice relationship and its moderation by time management behavior. Third, all data were collected through self-report measures, introducing potential common method variance bias. Although Harman's single-factor test indicated that common method variance was not a significant concern (31.4% of variance explained by a single factor), this test is relatively insensitive, and future research should incorporate multi-source data, including supervisor-rated voice behavior, peer assessments of time management, and objective performance indicators, as well as experience-sampling methodologies that capture voice behavior in real time to reduce retrospective bias and provide more ecologically valid assessments. Fourth, the study was conducted exclusively in the Pakistani organizational context, and the findings may not generalize to other cultural settings. Research has demonstrated that the expression of voice behavior is shaped by cultural factors including power distance, individualism-collectivism,

and communication norms. Cross-cultural replication studies are therefore needed to assess the generalizability of the moderation pattern and to identify the cultural boundary conditions of the confidence–time management–voice relationship. The present study contributes to the growing body of non-WEIRD organizational research, but further work is needed to develop and test theories that explicitly account for contextual variation. Fifth, the measurement of time management behavior, while based on a well-validated instrument, may not fully capture the multidimensional nature of temporal self-regulation. Time management encompasses not only planning and scheduling behaviors but also cognitive processes such as perceived control over time and metacognitive monitoring of temporal resources. Future research could employ more comprehensive measures that capture both behavioral and cognitive dimensions of time management and examine whether different dimensions differentially moderate the confidence–voice relationship.

Sixth, the study did not control for potentially important covariates such as organizational tenure, job level, or industry sector. Future research should include these variables as controls to rule out alternative explanations for the findings.

Beyond these methodological extensions, future research should examine additional boundary conditions and mediating mechanisms. While the present study identified time management behavior as a significant moderator, other individual and contextual factors—including psychological safety, leader-member exchange quality, and organizational justice perceptions—may also condition the confidence–voice relationship (Edmondson, 1999; Morrison, 2014). Similarly, mediating mechanisms such as voice efficacy and perceived voice opportunity should be examined to provide a more complete understanding of the processes linking confidence and time management to voice behavior. Research should also examine the potential dark side of the confidence–voice relationship and its moderation. While confidence and time management are generally considered positive attributes, excessive confidence may lead to overconfident and potentially counterproductive voice behaviors. Employees who are highly confident but low in time management may engage in impulsive or poorly timed voice attempts that fail to achieve their intended effects. Future research could examine curvilinear relationships and identify optimal levels of confidence and time management for effective voice behavior.

Intervention research is needed to test the practical implications of the present findings. While the moderation pattern suggests that time management training may be particularly beneficial for high-confidence employees, this hypothesis has not been directly tested in an experimental or quasi-experimental design. Organizations could implement and evaluate time management training programs targeted at employees high in job confidence and assess changes in voice behavior as an outcome, thereby providing valuable evidence regarding the causal effects of time management on voice and the practical utility of the intervention approach suggested by the present findings. Finally, future research should examine voice behavior in specific organizational contexts and sectors where upward communication is particularly critical. Healthcare organizations, aviation, and manufacturing settings involve high-stakes decisions where employee voice can have life-or-death implications. Understanding how confidence and time management operate in these contexts, and whether the moderation pattern observed here generalizes to such settings, would have significant practical value.

Conclusion

The present study provides novel empirical evidence that time management behavior moderates the relationship between job confidence and employee voice behavior, such that employees high in both job confidence and time management behavior are significantly more likely to engage in voice behaviors than employees high in confidence alone. These findings extend the voice behavior literature by identifying a theoretically meaningful behavioral competency that shapes the expression of confidence-based motivation in organizational contexts. The study also underscores the practical value of time management development as an organizational intervention for promoting proactive communication culture, particularly in hierarchical and resource-constrained organizational environments such as those prevalent in Pakistan.

By integrating insights from social cognitive theory, proactive motivation theory, and time management research within a unified moderation framework, this investigation advances theoretical understanding of the psychological and behavioral antecedents of employee voice. The findings highlight the importance of considering both motivational resources and behavioral competencies in understanding proactive organizational behavior, and they provide a foundation for future research examining the boundary conditions and mediating mechanisms of the confidence–voice relationship. As organizations continue to face pressures for innovation, adaptability, and continuous improvement, the ability to unlock employee voice through targeted interventions—targeting both confidence and time management—represents a valuable strategic capability. The present study offers empirical evidence to guide such efforts, while acknowledging the need for further research to refine and extend these insights across contexts and populations.

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