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INTROJECTED REGULATION AND EMPLOYEE ADAPTIVE PERFORMANCE. MODERATING ROLE OF ORGANIZATIONAL CULTURE: EVIDENCE FROM SOME SELECTED SECONDARY SCHOOLS IN KANO STATE

ABSTRACT

Employee adaptive performance has become a critical determinant of organizational effectiveness in the face of increasingly complex and volatile work environments. In the secondary school of Kano State, teachers are continuously confronted with demands for pedagogical flexibility, curricular adaptation, and professional resilience. Yet the motivational conditions under which adaptive performance is sustained or undermined remain empirically understudied in this context. This study examines the effect of introjected regulation on employee adaptive performance among teachers in selected secondary schools in Kano State, Nigeria, and investigates the moderating role of organizational culture on this relationship. Utilizing a correlational survey research design, the study involved a sample of 150 teachers from five selected secondary schools within Gwale Local Government Area of Kano State. Data were collected using a validated, structured questionnaire adapted from previous studies, while Self-Determination Theory was adopted as the guiding theoretical framework. Two hypotheses were tested using multiple regression analysis with the aid of SPSS version 23. The findings revealed that introjected regulation had a moderate positive and significant effect on employee adaptive performance ($\beta = .29$, $t = 3.40$, $p = .001$), indicating that internalized pressures such as the desire for approval or avoidance of guilt can moderately enhance adaptive behaviors among secondary school teachers. Furthermore, organizational culture significantly moderated this relationship, such that the positive effect of introjected regulation on adaptive performance was stronger among teachers in schools with higher involvement, consistency, adaptability, and mission-driven cultural profiles. Based on these results, the study recommends the institutionalization of constructive professional recognition and accountability mechanisms to positively channel introjected motivation, and deliberate investment in building participatory, mission-aligned school cultures to amplify the adaptive performance gains associated with introjected regulation.

Keywords; *Introjected regulation, adaptive performance, organizational culture, Self-Determination Theory, secondary schools, Kano State*

1.0 Introduction

Globally, employee adaptive performance remains a cornerstone for achieving resilience, institutional effectiveness, and sustained organizational success in an increasingly volatile and unpredictable environment (Pulakos et al., 2000; Tan & Antonio, 2022). In recent years, growing attention has been directed toward understanding the motivational antecedents of adaptive performance, given its centrality to organizational survival. Economic globalization, intense competition, rapid technological change, and mounting cross-sector pressures have compelled organizations including educational institutions to continuously seek strategies for sustaining and enhancing employees' capacity to adjust their behaviors in response to novel and changing demands (Koopmans et al., 2013; Charbonnier-Voirin & Roussel, 2012). Central to these efforts is the concept of motivation, particularly how different regulatory forms of extrinsic motivation shape employees' adaptive behavioral repertoires (Kapinga & Kitindi, 2018; Ryan & Deci, 2017). Motivation of employees in the workplace remains one of the most consequential determinants of the level of effort and behavioral quality that employees invest in their organizational roles. This means that motivation, in its various regulated forms, directly shapes how employees respond to change, manage uncertainty, solve novel problems, and demonstrate interpersonal flexibility — all behavioral hallmarks of adaptive performance (Niati, Siregar & Prayoga, 2021; Pulakos et al., 2000). Rusu and Avasilcai (2013) asserted that employees' motivation has a fundamental role in each organization, establishing the strategic objectives that drive behavioral engagement and goal-directed effort.

The pivotal role of motivation in the education sector cannot be overemphasized. Teachers who are adequately motivated are more likely to deliver quality instruction, demonstrate professional commitment, respond flexibly to classroom challenges, and contribute to positive student outcomes (Sani & Karoga, 2021). Nigeria's education system faces well-documented challenges, especially in public secondary schools: overcrowded classrooms, under-resourced facilities, and limited professional development opportunities are pervasive (Afolabi et al., 2010; Popoola & Belo, 2022). These structural conditions make the demand for teacher adaptive performance especially acute, as teachers must routinely improvise, adjust, and problem-solve in the absence of adequate institutional support.

In Kano State, one of Nigeria's most populous states in Northern Nigeria, secondary school teachers confront a confluence of these challenges. A study conducted by Sadiq (2018) on the effect of motivational strategies on teachers' job performance in Nasarawa Local Government of Kano State reported that teachers who perceived stronger motivational support through rewards, recognition, improved working conditions, and involvement in decision-making demonstrated higher levels of commitment, job satisfaction, and overall productivity. Another study by Abubakar (2019) in the Kano Municipal Education Zone examined the relationship between motivational strategies and teachers' productivity, finding that motivational practices were positively but weakly associated with aspects of teacher performance (r values ranging from

−0.194 to 0.186, $p > 0.05$), suggesting that the nature and type of motivational regulation matter for performance outcomes.

A particularly understudied form of extrinsic motivation in Nigerian educational contexts is introjected regulation — a partially internalized form of motivation in which individuals perform behaviors to avoid guilt, prevent shame, protect self-esteem, or gain the approval of significant others (Deci & Ryan, 2000; Ryan & Deci, 2017). While introjected regulation has received extensive theoretical treatment within Self-Determination Theory (SDT), its specific relationship to adaptive performance — and how that relationship is conditioned by the organizational culture of the school — has not been empirically examined in the context of secondary schools in Kano State. This constitutes the core gap that this study addresses.

Therefore, this study aims to assess the effect of introjected regulation on employee adaptive performance and the moderating role of organizational culture among secondary school teachers in Gwale Local Government, Kano State. The study pursues the following specific objectives:

- (i) To examine the effect of introjected regulation on employee adaptive performance of secondary school teachers in Kano State.
- (ii) To examine the moderating effect of organizational culture on the relationship between introjected regulation and employee adaptive performance of secondary school teachers in Kano State.

The paper is organized in to sections, section one is the introduction, Section two reviews relevant literature on introjected regulation, its dimensions, employee adaptive performance, and organizational culture, and presents the theoretical and conceptual frameworks that underpin the study. Section three outlines the methodology adopted, including the research design, population, sample, instrumentation, and analytical techniques employed. Section four presents the results of the analysis and discusses the findings in relation to existing literature and theory. Section five concludes the paper and offers recommendations based on the findings.

2.0 Literature Review

2.1 Concept of Introjected Regulation

Introjected regulation is a form of internalized extrinsic motivation in which behavior is driven by internal pressures such as guilt, ego-involvement, or the need for self-worth validation, rather than by genuine personal endorsement of the activity's value. Deci and Ryan (2000) broadly define introjected regulation as compliance motivated by internal contingencies feelings of obligation, shame, or the desire for approval — rather than genuine self-endorsement or volitional choice. The regulatory process has been taken inside the individual but has not been integrated into the self; the locus of causality remains partially external, and behavior is experienced as pressured rather than freely chosen. Ryan and Deci (2017) emphasize that introjected regulation reflects partial internalization, where individuals act to preserve self-esteem rather than from true identification with values, making behavior fundamentally ego-involving and contingently self-worth-based.

In the workplace, introjected regulation manifests as behavior performed out of an internal sense of obligation: a teacher who prepares lesson notes diligently not because teaching is intrinsically

meaningful but because failing to do so would produce feelings of professional inadequacy or fear of negative peer judgment. Howard et al. (2021) assert that introjected regulation is psychologically unstable, often leading to inconsistent performance outcomes, because the motivational force is contingent on the activation of ego-threats or approval cues rather than rooted in stable personal values. Similarly, Koole et al. (2019) assert that introjection may yield short-term effort but lacks sustainability in fostering meaningful employee engagement. Introjected regulation therefore occupies a transitional point between external and autonomous forms of motivation — while it can temporarily enhance effort, its critique lies in its psychological fragility and the anxiety it generates, which may suppress the flexibility and creativity demanded by adaptive performance.

Critically, introjected regulation differs from identified regulation, which involves a genuine personal endorsement of the activity's value and alignment with self-concept goals (Ryan & Deci, 2017). Teachers operating under introjected regulation adapt to new demands based on an ego-protective calculation of pride versus shame, rendering their adaptive behavior conditional, anxiety-laden, and potentially fragile under sustained institutional uncertainty — the very condition that characterizes secondary schools in Kano State.

2.2 Dimensions of Introjected Regulation

The concept of introjected regulation has been rigorously studied within the framework of Self-Determination Theory (SDT) developed by Deci and Ryan (1985; 2000). These scholars advanced the understanding of motivation by emphasizing that introjected regulation is not a monolithic construct but encompasses multiple interrelated motivational sub-processes, each reflecting a distinct mode of ego-involving behavioral regulation. Within this framework, the present study focuses on three key dimensions: ego-involvement, approval-seeking, and guilt and shame avoidance.

2.2.1 Ego-Involvement

Ego-involvement refers to the extent to which an individual's sense of self-worth is contingent upon performance outcomes, such that performance failures are experienced as threats to the self-concept rather than mere setbacks. Deci and Ryan (2000) define ego-involvement as motivation in which individuals perform to demonstrate superiority, avoid perceptions of incompetence, or maintain a favorable self-image relative to valued reference groups. In secondary school settings, ego-involving motivation manifests when a teacher delivers instruction primarily to avoid being perceived as incompetent by colleagues, students, or supervisors, rather than out of genuine interest in learner development. Ryan and Deci (2017) note that ego-involvement can temporarily energize behavioral effort but tends to generate performance anxiety and risk aversion that ultimately suppress the exploratory, flexible, and creative behaviors characteristic of adaptive performance. Howard et al. (2021) further observe that ego-involved teachers may achieve surface compliance but fail to demonstrate genuine commitment or innovation in adapting to novel instructional demands.

2.2.2 Approval-Seeking

Approval-seeking captures the degree to which behavior is motivated by the desire to gain positive evaluations from supervisors, colleagues, parents, or other significant stakeholders, rather than by the intrinsic value of the activity itself. Ryan and Deci (2017) describe approval-seeking as a form of introjected regulation in which individuals internalize external standards of approval without genuinely identifying with them, making their motivation perpetually contingent on the evaluative responses of others. Gagné and Deci (2005) posited that approval-seeking motivation often dominates in workplace settings characterized by hierarchical authority structures and externally monitored performance standards — conditions highly characteristic of public secondary schools in Kano State. In such contexts, approval-seeking teachers may demonstrate high compliance with observable administrative expectations (punctuality, lesson preparation, examination marking) while remaining reluctant to take the adaptive risks — adopting novel pedagogical methods, challenging dysfunctional school routines, or advocating for student welfare — that genuine adaptive performance requires. Koole et al. (2019) assert that approval-seeking motivation is particularly sensitive to feedback and social evaluation, making it susceptible to the prevailing organizational cultural climate of the school.

2.2.3 Guilt and Shame Avoidance

Guilt and shame avoidance represents the motivational force generated by the anticipation of negative self-evaluative emotions guilt at failing to meet internalized standards or social emotions shame arising from actual or imagined negative judgment by significant others (Ryan & Deci, 2017; Bieg et al., 2024). In the secondary school environment, guilt and shame avoidance may constitute one of the most pervasive motivational forces: teachers who attend school regularly, mark students' assignments, and participate in staff activities primarily out of a fear of the social sanctions and personal shame that would accompany non-compliance. While such motivation sustains role-compliant behavior, it is associated in the psychological literature with heightened risk aversion, reduced cognitive flexibility, and diminished capacity for creative problem-solving (Howard et al., 2021; Koole et al., 2019) qualities antithetical to adaptive performance. Guilt and shame avoidance therefore represents the most psychologically costly dimension of introjected regulation, generating behavioral compliance at the price of the psychological vitality necessary for genuine adaptive performance.

2.3 Concept of Employee Adaptive Performance

Employee adaptive performance has emerged as one of the most actively researched performance constructs in organizational psychology, particularly in response to the increasingly volatile, uncertain, complex, and ambiguous character of contemporary work environments. Pulakos et al. (2000) produced the foundational empirical taxonomy of adaptive performance, drawing on critical incident analysis of over 1,000 job-relevant incidents across military and civilian occupations. Their taxonomy identified eight behavioral dimensions: handling emergencies or crisis situations; handling work stress; solving problems creatively; dealing with uncertain and unpredictable work situations; learning work tasks, technologies, and procedures; demonstrating

interpersonal adaptability; demonstrating cultural adaptability; and demonstrating physically oriented adaptability.

Charbonnier-Voirin and Roussel (2012) define adaptive performance as the capacity of employees to modify their behavioral patterns in response to the novel or dynamically changing demands of their work environment, encompassing proactive adjustment of strategies, methods, and interpersonal approaches. Tan and Antonio (2022) stress that adaptive performance is not merely a personality-driven trait but is substantially shaped by motivational and contextual variables, confirming the relevance of examining motivational regulation as an antecedent of adaptive behavioral adjustment. More recently, Koopmans et al. (2013) emphasized that adaptive performance reflects the individual's capacity to remain effective across a wide range of changing task demands, distinguishing it from task performance (which concerns proficiency in standardized functions) and contextual performance (which concerns supportive organizational behavior).

For secondary school teachers in Kano State, adaptive performance encompasses a diverse range of behaviorally specific competencies: adapting lesson delivery strategies to accommodate learners with diverse academic abilities and socioeconomic backgrounds; responding innovatively to periodic shortages of instructional materials and infrastructure failures; adjusting pedagogical methods in alignment with curriculum changes mandated by the Kano State Ministry of Education; managing interpersonal conflicts within staff teams and between teachers and students; and developing new digital and technological competencies as education policy progressively integrates information communication technology into secondary school instruction (Hussaini & Muhammad, 2023; Ogunode et al., 2023). These practical manifestations confirm that adaptive performance is the most contextually appropriate performance criterion for the present study's focus on Kano State's secondary school teachers.

2.4 Nexus between Introjected Regulation and Employee Adaptive Performance

Introjected regulation, as a partially internalized but fundamentally controlled form of extrinsic motivation, has a theoretically ambiguous and empirically contested relationship with adaptive performance. Studies within the SDT tradition have consistently demonstrated that controlled forms of motivation — encompassing both external and introjected regulation — are generally negatively or non-significantly associated with performance outcomes that require cognitive flexibility, creativity, and proactive behavioral adjustment (Ryan & Deci, 2017; McAnally & Hagger, 2024). Zhang et al. (2016), in a two-study investigation of Chinese organizational employees, examined the differential effects of four motivational profiles on multiple dimensions of work performance, finding that introjected regulation did not significantly predict adaptive performance, while identified regulation was a significant positive predictor — suggesting that the ego-involving quality of introjected regulation may be functionally insufficient to generate the behavioral flexibility that adaptive performance demands.

Van den Broeck et al. (2021), in a meta-analytic review, confirmed that introjected regulation was associated with higher levels of burnout and lower levels of vitality relative to identified and intrinsic motivation, reinforcing the interpretation that ego-involving motivation suppresses the

psychological resources necessary for sustained adaptive behavior. Howard et al. (2021) similarly found that introjected regulation produced inconsistent performance outcomes and was significantly less effective than identified regulation in driving high-quality, flexible, and proactive work behavior across organizational contexts.

Notwithstanding these theoretical predictions, contextual factors may substantially modify the relationship between introjected regulation and adaptive performance. In the specific socio-institutional context of secondary schools in Kano State — where professional shame, social accountability, and the management of communal reputation are particularly salient motivational forces — the ego-protecting and approval-seeking dynamics inherent in introjected regulation may generate moderate levels of adaptive behavioral effort, even in the absence of fully autonomous motivation. Abubakar (2019) observed that motivational strategies in Kano State schools produced weak but directionally positive associations with teacher performance, suggesting that even controlled motivational forms may contribute marginally to adaptive outcomes in this context.

The moderating role of organizational culture is theoretically motivated by SDT's proposition that the social environment — including the cultural climate of the organization — functions as an autonomy-supportive or controlling context that conditions the functional consequences of different motivational regulations (Ryan & Deci, 2017; Deci et al., 2017). Chomariah et al. (2022) demonstrated that school culture moderated the relationship between achievement motivation and teacher performance in Indonesian secondary schools, with participatory cultures producing stronger motivation-performance linkages. Wanjiru et al. (2024) similarly found that organizational culture moderated the relationship between reward systems and teacher retention in Kenyan secondary schools, confirming that cultural context meaningfully shapes how motivational variables translate into teacher behavioral outcomes. These findings collectively support the expectation that organizational culture functions as a genuine boundary condition in the introjected regulation–adaptive performance relationship among secondary school teachers in Kano State. Thus, the study hypothesized the following:

H1: *Introjected regulation has a significant positive effect on employee adaptive performance of secondary school teachers in Kano State.*

H2: *Organizational culture has a significant moderating effect on the relationship between introjected regulation and employee adaptive performance of secondary school teachers in Kano State.*

2.5 Theoretical Framework

The study adopts Self-Determination Theory (SDT) as its guiding theoretical framework, providing the conceptual foundation for analysing the dynamics of introjected regulation's effect on employee adaptive performance and the conditioning role of organizational culture. Self-Determination Theory, propounded by Deci and Ryan in 1985 and comprehensively systematized in Ryan and Deci (2017), focuses on the nature of human motivation and how contextual social environments support or undermine the quality of motivational internalization and behavioral engagement. The theory posits that individuals have inherent psychological needs for autonomy,

competence, and relatedness, and that the degree to which these needs are satisfied in a social context determines the quality of motivational regulation — from controlled (external and introjected) to autonomous (identified, integrated, and intrinsic) forms (Deci & Ryan, 2000; Ryan & Deci, 2017). Intrinsic motivation is driven by internal interest and inherent satisfaction; extrinsic motivation, of which introjected regulation is a partially internalized variant, is influenced by external pressures, social contingencies, and ego-relevant outcomes (Deci et al., 2017).

Within SDT, the Organismic Integration Theory (OIT) sub-theory specifies that introjected regulation occupies a midpoint on the motivational continuum, reflecting internal regulation by contingent self-esteem and ego-protection rather than by genuine self-endorsement. SDT predicts that introjected regulation will be functionally insufficient to generate the autonomous, flexible, and creative cognitive engagement required for adaptive performance, but also that this limitation will be contextually conditioned: organizational environments that are autonomy-supportive, involvement-oriented, and mission-driven can partially offset the motivational limitations of introjected regulation by providing external scaffolding that compensates for the absence of internal autonomous motivation (Ryan & Deci, 2017; Deci et al., 2017). The strengths of Self-Determination Theory lie in its comprehensive, empirically grounded account of the social-contextual conditions that shape motivational quality and performance. However, a recognized limitation is that the theory may oversimplify the complexity of motivation by organizing regulatory processes along a single continuum, without fully accounting for cross-cultural variations in the meaning of autonomy or the interaction between motivational forms and specific organizational contexts (Ryan & Deci, 2017). Notwithstanding this limitation, SDT remains the most empirically validated and theoretically comprehensive framework for the present study's objectives.

2.6 Conceptual Framework

The researcher's conceptual model below illustrates how the independent variable (introjected regulation) influences the dependent variable (employee adaptive performance), with organizational culture serving as the moderating variable that conditions the strength and direction of this relationship.



Fig. 1; Researchers conceptual framework

3.1 Methodology

This study adopted a quantitative research design, specifically a correlational survey, to investigate the effect of introjected regulation on employee adaptive performance and the moderating role of organizational culture among secondary school teachers in Kano State. This design allows for the systematic assessment of the statistical relationships between variables and the empirical testing of the proposed moderation model without experimental manipulation (Creswell & Creswell, 2018). The academic staff (teachers) of selected public secondary schools in Kano were the study's target group, utilizing five public secondary schools within Gwale Local Government Area of Kano State for the study.

The population consisted of all the teaching staff within the selected secondary schools. A stratified sampling technique was used to divide the selected schools into academic and non-academic staff, and the researchers focused on academic staff as respondents from the various schools. Using a simple random technique to ensure equal representation, 30 respondents were selected from each school accordingly. Therefore, the sample size for the study is 150 respondents (teachers) within the selected secondary schools in Kano State. A total of 150 questionnaires were distributed among respondents who were teaching staff of the selected secondary schools in Kano State.

The instruments used in this study were adopted from previous studies, confirming their established reliability and validity. Introjected regulation was measured using adapted items from the Multidimensional Work Motivation Scale (MWMS) of Gagné et al. (2015), with items specifically targeting the ego-involvement, approval-seeking, and guilt/shame avoidance sub-dimensions of introjected regulation, indicating a Cronbach Alpha value of 0.80. Employee adaptive performance was measured using an adapted scale developed by Charbonnier-Voirin and Roussel (2012), grounded in the Pulakos et al. (2000) taxonomy, capturing adaptive problem-solving, learning adaptability, and interpersonal adaptability, with a Cronbach Alpha value of 0.80. Organizational culture was measured using adapted items from the Denison Organisational Culture Survey (DOCS; Denison, 1995), capturing the four dimensions of involvement, consistency, adaptability, and mission, indicating a Cronbach Alpha value of 0.81. All alpha values exceeded Nunnally's (1978) recommended threshold of 0.70, confirming adequate internal consistency reliability.

The researcher employed IBM Statistical Package for Social Science (SPSS) software, version 23. Multiple regression analysis was conducted to examine the influence of introjected regulation on the adaptive performance of secondary school teachers in Kano State, and to test the moderating effect of organizational culture using interaction term analysis. The decision to use multiple regression analysis is based on its ability to predict the effect of more than one variable on another variable and to assess the significance of interaction effects that constitute moderation (Hayes, 2018).

4.1 Results and Discussion

This section presents the results of the analysis and discusses the findings in relation to the study's objectives and hypotheses. It Presents the results of the correlation and regression analyses testing the direct and moderating relationships proposed in the conceptual framework. The findings are subsequently interpreted and discussed in light of relevant theory and prior empirical studies.

Table 1: Summary of multiple regression analysis showing the effect of introjected regulation on employee adaptive performance and the moderating role of organizational culture

Variables	B	Std. Error	Beta	t-Value	Sig	Decision
Introjected Regulation → AP	0.34	0.10	0.29	3.40	.001	Accepted
Organizational Culture → AP	0.41	0.08	0.38	5.13	.000	Accepted
IR × OC (Interaction) → AP	0.18	0.06	0.19	3.00	.003	Accepted

Note; **AP** = Adaptive Performance; **IR** = Introjected Regulation; **OC** = Organizational Culture; $R = .61$, $R^2 = .37$, Adjusted $R^2 = .36$, $p < .001$

As shown in Table 1, introjected regulation demonstrated a moderate but positive and statistically significant effect on employee adaptive performance ($\beta = .29$, $t = 3.40$, $p = .001$), indicating that secondary school teachers in Kano State who are driven by internalized pressures such as the desire for supervisory approval, avoidance of professional shame, or the protection of self-esteem demonstrate higher levels of adaptive behavioral adjustment in their teaching roles. This finding is consistent with the position of Van den Broeck et al. (2021), who observed that introjected regulation can drive short-term performance improvements in contexts where social sanctions for non-performance are salient, and supports H1 of the present study.

Organizational culture also demonstrated a strong and statistically significant positive main effect on employee adaptive performance ($\beta = .38$, $t = 5.13$, $p < .001$), indicating that teachers in schools with higher involvement, consistency, adaptability, and mission-oriented cultural profiles demonstrate markedly higher levels of adaptive performance. This finding confirms the position of Abdullahi et al. (2021) that organizational culture is a significant determinant of employee performance outcomes in educational institutions.

Most critically, the interaction term (Introjected Regulation $\times$ Organizational Culture) was statistically significant ($\beta = .19$, $t = 3.00$, $p = .003$), providing direct empirical support for H2 — that organizational culture significantly moderates the relationship between introjected regulation and employee adaptive performance among secondary school teachers in Kano State. The positive sign of the interaction coefficient indicates that the effect of introjected regulation on adaptive performance is amplified in schools with higher organizational culture scores, suggesting that

supportive, participatory, and mission-driven school cultures channel the motivational energy of introjected regulation into productive adaptive behavioral outcomes.

Table 2: Model Summary of Multiple Regression Analysis Predicting Adaptive Performance

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate	p
1	.61	.37	.36	0.51	<.001

The model summary indicates that introjected regulation, organizational culture, and their interaction significantly predict adaptive performance among secondary school teachers in Kano State. With an R² value of .37, the model explains 37% of the variance in adaptive performance, suggesting that over one-third of the variation in teachers' adaptive behavioral outcomes can be attributed to differences in introjected regulation, organizational culture, and the moderating interaction between them. This constitutes a substantial effect size in the social sciences (Cerasoli et al., 2014), confirming the centrality of motivational regulation and organizational culture in shaping teachers' adaptive work behaviors in the Kano State secondary school context.

4.2 Discussion of Findings

The study investigated the effect of introjected regulation on employee adaptive performance and the moderating role of organizational culture among secondary school teachers in Kano State. The regression analysis revealed that introjected regulation, organizational culture, and their interaction jointly explained 37% of the variance in adaptive performance, underscoring their collective importance in determining teachers' adaptive behavioral engagement within the educational sector. The finding that introjected regulation has a moderate positive and significant effect on adaptive performance ($\beta = .29$, $p = .001$) among secondary school teachers in Kano State is a nuanced departure from the predominant theoretical expectation in the SDT literature, which generally predicts that controlled motivation forms will be negatively or non-significantly associated with flexible, proactive performance outcomes (Ryan & Deci, 2017; McAnally & Hagger, 2024). However, this positive finding is theoretically explicable in the specific socio-cultural context of northern Nigeria. The ego-protecting and approval-seeking dynamics of introjected regulation — avoiding the social shame of professional inadequacy, maintaining the approval of respected supervisors and community stakeholders, protecting one's reputation as a competent teacher — may generate sufficient motivational energy to sustain adaptive behavioral effort in a context where professional identity and social reputation carry exceptional motivational weight. This interpretation is consistent with the findings of Zhang et al. (2016), who noted that introjected regulation's performance consequences are contextually conditioned, and with the observations of Van den Broeck et al. (2021) that introjected regulation can drive short-term performance improvements when social evaluation is salient. In the case of Kano State schools, teachers may be motivated by deeply embedded cultural and communal expectations of professional

responsibility, even if this does not translate into the fully autonomous motivation that SDT ideally prescribes.

The finding that organizational culture significantly moderates the relationship between introjected regulation and adaptive performance ($\beta = .19$, $p = .003$) aligns with the contextual autonomy-support framework of SDT (Ryan & Deci, 2017) and with empirical evidence from Chomariah et al. (2022) and Wanjiru et al. (2024) regarding the moderating role of school culture in motivation-performance relationships. The positive sign of the interaction coefficient indicates that the positive effect of introjected regulation on adaptive performance is amplified in schools with higher organizational culture scores — that is, in schools characterized by greater employee involvement, clarity of institutional mission, consistency of shared values, and reward of adaptive and innovative behaviors. This finding suggests that when the organizational culture provides the scaffolding of shared purpose, collegial support, and institutional legitimacy, teachers motivated by ego-involvement and approval-seeking can channel their motivational energy into adaptive behaviors that the cultural context recognizes, rewards, and sustains. Conversely, in schools with hierarchical, low-involvement cultures that punish deviance from established routines, the anxiety and risk aversion inherent in introjected regulation are likely to suppress rather than facilitate adaptive performance.

These findings have important practical implications for school administrators and educational policymakers in Kano State. The positive direct effect of introjected regulation, while psychologically less optimal than autonomous motivation, confirms that performance management systems that constructively engage teachers' professional self-esteem and social accountability can yield meaningful adaptive performance gains. Simultaneously, the strong organizational culture effect and the significant moderation confirm that investing in cultural development — building participatory, mission-aligned, and adaptability-rewarding school cultures — is both directly beneficial for adaptive performance and amplifying of the performance gains associated with existing motivational regulatory mechanisms.

5.1 Conclusion and Recommendations

This study examined the effect of introjected regulation on employee adaptive performance and the moderating role of organizational culture among secondary school teachers in Kano State, Nigeria. The findings reveal a moderate positive and significant effect of introjected regulation on adaptive performance ($\beta = .29$, $p = .001$) and a significant positive moderating effect of organizational culture on this relationship ($\beta = .19$, $p = .003$), with the full model explaining 37% of the variance in adaptive performance. These outcomes underscore the importance of both motivational regulation and organizational culture as determinants of teacher adaptive behavioral outcomes in the secondary school context of Kano State.

Theoretically, the results extend Self-Determination Theory to the secondary school context in northern Nigeria, providing the first known empirical examination of the introjected regulation–adaptive performance relationship and its cultural moderation in this setting. The contextually modified positive effect of introjected regulation observed in this study enriches the SDT literature by demonstrating that the socio-cultural specificity of the research context — particularly the

collectivist, social-reputation-sensitive character of northern Nigerian professional life — can produce motivation-performance relationships that deviate meaningfully from patterns typically observed in Western and individualist contexts. The significant moderation by organizational culture confirms the Denison (1990, 1995) model's applicability and explanatory relevance in the sub-Saharan African secondary school setting.

Practically, the findings confirm that extrinsic motivation mechanisms rooted in introjected regulation — professional recognition, social accountability, collegial peer evaluation — can produce meaningful adaptive performance gains among secondary school teachers in Kano State, particularly when embedded within culturally supportive organizational environments. However, reliance on introjected regulation alone, without deliberate investment in building autonomy-supportive school cultures, may sustain performance only at a moderate level and may be vulnerable to motivational erosion when ego-threats or approval opportunities are absent.

The study recommends the following:

- i. Introjected regulation should be positively channeled through the institutionalization of constructive professional recognition and accountability systems. The findings showed a moderate positive relationship between introjected regulation and teacher adaptive performance, confirming that teachers respond adaptively when their professional self-worth, social reputation, and collegial standing are constructively engaged. School principals and education authorities in Kano State can harness this motivation by institutionalizing annual Best Teacher Recognition Programs, structured peer-review and mentorship systems, and public acknowledgment of innovative pedagogical practices at school and local government levels. Such initiatives will channel the ego-involvement and approval-seeking dimensions of introjected regulation toward adaptive behavioral engagement, while gradually building the professional confidence and competence that support transition toward more autonomous motivational regulation over time.
- ii. Organizational culture should be deliberately strengthened to amplify the adaptive performance gains associated with introjected regulation. The significant moderation effect of organizational culture confirms that high-involvement, mission-driven, and adaptability-rewarding school cultures substantially amplify the positive effect of introjected regulation on teacher adaptive performance. The Kano State Ministry of Education should implement structured school-level organizational culture auditing programs, using validated instruments such as the Denison Organisational Culture Survey, to identify cultural strengths and gaps across public secondary schools. Schools identified as having low involvement, consistency, or adaptability culture scores should receive targeted leadership development support, change management facilitation, and resource investment to strengthen their cultural foundations for teacher adaptive performance.
- iii. School administrators should create enabling conditions that support teachers' adaptive behavioral efforts. The positive effect of introjected regulation on adaptive performance,

while statistically significant, is moderate rather than strong, suggesting that structural and environmental barriers continue to constrain teachers' adaptive performance in Kano State's secondary schools. School authorities and education policymakers should ensure that teachers have access to adequate teaching and learning resources, manageable instructional workloads, regular professional development opportunities, and a physically safe and psychologically supportive school environment. By reducing structural impediments to adaptive performance, these enabling conditions will allow the motivational energy generated by introjected regulation to translate into higher levels of adaptive behavioral adjustment rather than being dissipated in navigating avoidable institutional obstacles.

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