



From Curiosity to Work Engagement: the Role of Proactive Personality and the Limited Effect of Organizational Culture Among Vocational Educators

Mega Kumala Ratna^{1*}, Hunik Sri Runing Sawitri²

^{1,2}Universitas Sebelas Maret, Surakarta, Indonesia



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ABSTRACT

Objective: Focusing on vocational educators, this study analyzed the connection between curiosity and work engagement by incorporating proactive personality as an intervening variable and organizational culture as a contextual moderator. In the context of rapid digital transformation, sustaining educator engagement has become increasingly critical yet challenging. **Research Method:** Using a quantitative framework, this study gathered data through a cross-sectional survey of 208 vocational educators working in institutions under the Ministry of Industry in Indonesia, which were then analyzed using the PLS-SEM approach. **Research Findings:** The findings suggest that higher levels of curiosity are associated with stronger proactive personality and greater work engagement. Proactive personality also contributes to higher work engagement by functioning as a mediating mechanism that translates intrinsic motivation into active work involvement. Conversely, no significant moderating effect of organizational culture was observed. Overall, the findings emphasize that proactive psychological tendencies play a more substantial role than environmental factors in influencing work engagement. **Novelty:** The study also extends the empirical application of a moderated-mediation model to the vocational education context, which has been relatively underexplored in previous studies.

INTRODUCTION

The ongoing expansion of digital transformation has significantly altered the expectations placed on educators, particularly within vocational education systems where adaptability and continuous skill development are essential (World Economic Forum, 2020). In such environments, educators are no longer limited to transferring technical knowledge but are also expected to respond actively to rapid technological changes and shifting industry demands (UNESCO, 2021). Cross national research on vocational teachers reveals that personal attributes particularly intrinsic motivation and a disposition toward learning predict digital competence development more reliably than institutional factors alone, highlighting the centrality of individual psychological characteristics in navigating digital change (Cattaneo et al., 2022). Nevertheless, sustaining robust work engagement among educators remains a persistent challenge, particularly in contexts marked by insufficient institutional support, resistance to change, and inflexible organizational arrangements (Bakker & Demerouti, 2017; Saks, 2019).

Psychologically, work engagement captures the degree to which people feel vital, absorbed, and committed within their occupational roles (Bakker et al., 2014; Schaufeli et al., 2002). Educators with elevated engagement are generally characterized by persistence, genuine enthusiasm, and dedication to professional duties (Saks, 2019). A comprehensive review of JD-R model applications in contemporary work environments affirms its enduring utility for explaining how the interplay of job demands and resources shapes employee engagement across sectors, including education (Galanakis & Tsitouri,

2022). Within educational contexts specifically, internal psychological assets such as self-efficacy and resilience have emerged as meaningful predictors of teacher engagement, underscoring the pivotal role of individual psychological characteristics in sustaining professional involvement (Heng & Chu, 2023). The antecedents of work engagement in vocational education, particularly within developing-economy contexts like Indonesia, remain inadequately examined, pointing to a clear need for further inquiry (Bakker & Albrecht, 2018).

Growing scholarly interest has focused on how individual psychological resources shape work-related attitudes and behavioral outcomes (Bakker & Demerouti, 2017; Xanthopoulou et al., 2007). Among these resources, curiosity stands out as an intrinsic disposition to pursue novel information, venture into unfamiliar territory, and engage actively with challenges (Grossnickle, 2016; Kashdan et al., 2009). For educators specifically, curiosity underpins ongoing knowledge renewal, experimentation with innovative pedagogical approaches, and sustained active involvement in professional tasks (Engel, Susan, 2015). Higher curiosity tends to coincide with greater receptiveness to change and a stronger inclination to invest deeply in work-related activities (Kashdan et al., 2018). Empirical research further demonstrates that curiosity amplifies work engagement through pathways including intrinsic motivation, a commitment to ongoing learning, and sustained immersion in tasks (Al Bloushi et al., 2024; Kashdan et al., 2018; Tu & Lee, 2025). Beyond engagement, curiosity-related traits have been linked within the JD-R framework to proactive knowledge-seeking and creative output, indicating that curiosity can channel individual energy into action-oriented behavioral responses on the job (Xu & Tsai, 2025).

The path from curiosity to work engagement is unlikely to be straightforward; rather, it appears to operate through intermediate behavioral mechanisms. A compelling explanatory route runs through proactive personality, which gauges the degree to which individuals take initiative and actively shape their environment (Bateman & Crant, 1993; Crant, 2000). Elevated curiosity is thought to cultivate proactive tendencies, equipping individuals to translate their internal motivation into concrete work-related actions (AlShamsi et al., 2025; N. Li et al., 2010). Consistent with this reasoning, prior studies have found that curiosity is closely related to proactive conduct, particularly through exploratory activity and self-initiated action (Kashdan et al., 2018; N. Li et al., 2010). Nonetheless, direct empirical examination of the mediating function of proactive personality within educational settings remains sparse.

In addition to individual characteristics, contextual factors may also shape behavioral outcomes. Organizational culture, which reflects shared values and norms within an institution, can either facilitate or constrain individual behavior (Cameron, Kim S., 2011; Schein, Edgar H., 2010). The extent to which curiosity translates into proactive personality may depend on cultural conditions: settings that foster openness and encourage learning are likely to strengthen this relationship, whereas more constrictive environments may weaken it (AlShamsi et al., 2025; Denison, 1996). Grounded in Interactionist Perspective Theory, which posits that behavior arises from the dynamic interplay of personal attributes and environmental conditions (Schneider, 1987; Tett & Burnett, 2003a), the present study treats organizational culture as a candidate moderating variable.

While prior scholarship has explored relationships among curiosity, proactive personality, and work engagement (AlShamsi et al., 2025), empirical validation of this configuration across diverse institutional settings remains insufficient. The gap is especially pronounced in the vocational education sectors of developing nations, where educators carry a critical responsibility for developing a competent workforce (UNESCO, 2021). Within Indonesia specifically, although vocational institutions are formally mandated to develop skilled human capital, persistent challenges around labor market alignment and educator preparedness continue to hinder the effective fulfillment of that mandate (Ariansyah et al., 2024). Moreover, although prior work has addressed various psychological mechanisms and contextual influences underlying these relationships, the evidence base remains scattered and disproportionately concentrated in non-educational or corporate contexts (AlShamsi et al., 2025; Bakker & Demerouti, 2017).

Motivated by these gaps, the present study investigates how curiosity shapes work engagement among vocational educators in Indonesia, positioning proactive personality as a mediating mechanism and organizational culture as a contextual boundary condition. The overarching aim is to deepen understanding of the psychological underpinnings of engagement and to clarify the degree to which environmental factors condition educator behavior.

RESEARCH METHOD

To investigate the relationships among curiosity, proactive personality, organizational culture, and work engagement, this study adopted a quantitative design based on a cross-sectional survey. The proposed model was structured to capture both direct and indirect effects by incorporating mediation and moderation relationships. A cross-sectional design was adopted, as it provides the ability to examine variable relationships within a single time frame (Creswell, John W, 2014).

The research was conducted across thirteen vocational education institutions operating under the Ministry of Industry in Indonesia. The population consisted of educators, including lecturers and instructors, who are actively engaged in teaching and instructional activities.

Participants were selected using a purposive sampling method to ensure their relevance to the objectives of the study (Creswell, John W, 2014; Etikan, 2016). Participants were selected based on two main criteria: (1) being employed as lecturers or instructors in vocational institutions under the Ministry of Industry, and (2) having current or prior teaching experience. These criteria were applied to ensure that respondents possess adequate experience in handling instructional responsibilities and adapting to technological developments within vocational education contexts. Although the targeted sample size was 250, a total of 208 valid responses were obtained and deemed adequate for PLS-SEM analysis, as it fulfills the minimum requirement for achieving reliable model estimation (Hair, 2014).

Measurement of all constructs was carried out using instruments adopted from prior validated studies, with responses captured on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). To measure the study variables, curiosity was assessed using the Curiosity and Exploration Inventory-II (Kashdan et al., 2009), whereas proactive personality was evaluated using the scale developed by Bateman and Crant (1993). Organizational culture was examined through the Competing Values Framework proposed by Cameron and Quinn (2011). Meanwhile, work engagement was captured

using the Utrecht Work Engagement Scale (UWES), which consists of vigor, dedication, and absorption dimensions (Schaufeli et al., 2006).

The proposed model was analyzed using the PLS-SEM approach, which is considered suitable for evaluating complex relationships involving mediating and moderating effects, particularly under conditions of limited sample size and non-normal data distribution (Hair, 2014; Henseler et al., 2015). The analysis was performed through two sequential stages.

The analysis began with an evaluation of the measurement model to determine whether the constructs met the required standards. This included testing convergent validity using Average Variance Extracted (AVE), assessing reliability through Cronbach's alpha and composite reliability, and examining discriminant validity using the Fornell-Larcker approach.

The analysis then proceeded to the structural model to examine the proposed relationships among variables. Prior to hypothesis testing, collinearity among predictor construct was assessed using the Variance Inflation Factor (VIF). The model's explanatory power was evaluated using the coefficient of determination (R^2), while predictive relevance was assessed the Stone-Geisser Q^2 obtained via the blindfolding procedure. Hypothesis testing was conducted using path coefficients, t-statistics, and p-values generated through bootstrapping at a 5% significance threshold. Furthermore, mediation effects were examined through indirect effect analysis, whereas moderation effected was tested using an interaction-based approach within the PLS-SEM framework.

RESULTS AND DISCUSSION

Results

Using SmartPLS 4, the data were examined through the PLS-SEM approach, which involved evaluating both the measurement model and the structural model as the main analytical components. The analysis first focused on evaluating the measurement model to ensure that the constructs met validity and reliability criteria, followed by an assessment of the structural model to explore the relationships among variables, including direct, indirect, and moderating effects.

Measurement Model Evaluation

To assess the measurement model, several criteria were applied, including convergent validity, internal consistency, and discriminant validity. Convergent validity was examined using outer loadings and Average Variance Extracted (AVE), while reliability was evaluated based on Cronbach's alpha and composite reliability.

The measurement model was first assessed by examining the relationships between latent constructs and their indicators. Figure 1 presents the outer model and the standardized loading values obtained from the PLS-SEM analysis.

According to Hair et al. (2014), indicator loadings above 0.70 are generally preferred, although values above 0.50 may still be considered acceptable in exploratory research. Several indicators within the curiosity construct fell below the 0.70 threshold, namely C8 (0.515), C10 (0.619), C2 (0.664), C1 (0.667), and C3 (0.669), though all remained within the acceptable 0.50–0.70 range. These indicators were retained because each captures a conceptually distinct facet of curiosity as a multidimensional construct, and their removal would narrow the content coverage of the scale without a clear empirical justification.

The construct-level reliability and validity criteria were still satisfied, as curiosity achieved a Cronbach's alpha of 0.887, composite reliability of 0.892, and AVE of 0.503, all exceeding the minimum recommended thresholds, supporting the decision to retain all items and preserve the theoretical breadth of the measure.

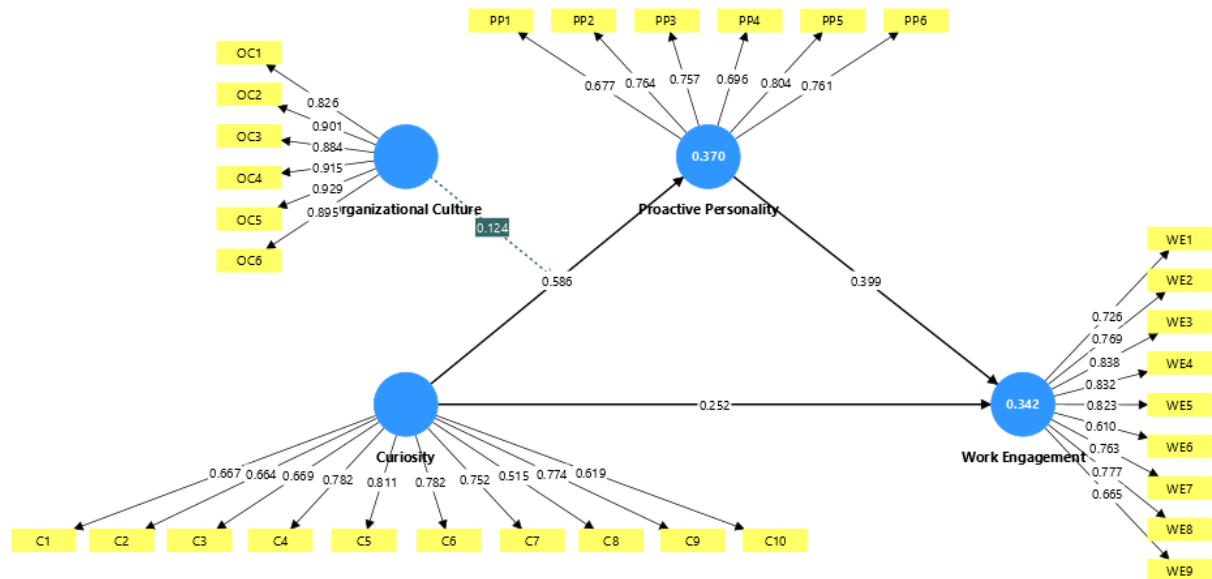


Figure 1. Outer Model

Table 1 shows that all constructs fulfill the reliability requirements, with both Cronbach's alpha and composite reliability exceeding the threshold of 0.70 (Hair, 2014). Moreover, AVE values above 0.50 indicate that each construct explains a substantial portion of variance in its indicators.

Table 1. Construct Reliability and Validity

Construct	Cronbach's Alpha	Composite Reliability	AVE
Curiosity	0.887	0.892	0.503
Organizational Culture	0.949	0.985	0.796
Proactive Personality	0.838	0.845	0.554
Work Engagement	0.907	0.915	0.577

Discriminant validity was evaluated through the Fornell-Larcker approach, where the results presented in Table 2 show that the square root of AVE for each construct is greater than its inter-construct correlations, demonstrating that each construct is clearly differentiated from the others.

Table 2. Discriminant Validity (Fornell-Larcker Criterion)

Construct	Curiosity	Organizational Culture	Proactive Personality	Work Engagement
Curiosity	0.709			
Organizational Culture	0.330	0.892		
Proactive Personality	0.593	0.134	0.744	
Work Engagement	0.488	0.373	0.549	0.759

Structural Model Evaluation

To test the proposed relationships among constructs, the structural model was examined by evaluating collinearity statistics, the coefficient of determination (R^2), predictive relevance (Q^2), and the significance of path relationships using bootstrapping techniques.

Prior to examining the path relationships, collinearity among the predictor constructs was assessed using Variance Inflation Factor (VIF) values. As presented in Table 3, all VIF values range from 1,067 to 1,542, well below the recommended threshold of 5.0 (Hair, 2014), indicating that multicollinearity does not pose a concern in the structural model and that the path coefficient estimates can be interpreted with confidence.

Table 3. Collinearity Statistics (VIF)

PATH	VIF
Curiosity → Proactive Personality	1,187
Curiosity → Work Engagement	1,542
Organizational Culture → Proactive Personality	1,122
Organizational Culture x Curiosity → Proactive Personality	1,067
Proactive Personality → Work Engagement	1,542

Table 4 presents the coefficient of determination (R^2) values for the endogenous constructs. According to Hair et al. (2014), these values indicate a moderate level of explanatory power, suggesting that the proposed model provides an adequate explanation of the endogenous constructs.

Table 4. Coefficient of Determination (R^2)

Construct	R-square	R-square adjusted
Proactive Personality	0,370	0,361
Work Engagement	0,342	0,336

Table 5 presents the predictive relevance (Q^2) values obtained through the blindfolding procedure. Since all Q^2 values are greater than zero, the model demonstrates satisfactory predictive relevance for both endogenous constructs. These findings indicate that the model has adequate capability to predict the observed data and supports the overall quality of the structural model (Hair, 2014).

Table 5. Predictive Relevance (Q^2)

Construct	Q^2
Proactive Personality	0.340
Work Engagement	0.211

The analysis of structural relationships reveals that curiosity has a significant positive influence on proactive personality ($\beta = 0.586$, $t = 10.333$, $p = 0.000$). Furthermore, proactive personality significantly affects work engagement ($\beta = 0.399$, $t = 5.946$, $p = 0.000$).

A direct positive relationship between curiosity and work engagement is observed, although the effect size is comparatively modest ($\beta = 0.252$, $t = 3.531$, $p = 0.000$). A significant mediation effect is identified, where proactive personality serves as an intervening variable linking curiosity to work engagement ($\beta = 0.234$, $t = 6.054$, $p = 0.000$).

The analysis indicates that organizational culture does not play a significant moderating role in the relationship between curiosity and proactive personality ($\beta = 0.124$, $t = 1.787$, $p = 0.074$), as the interaction effect is not statistically significant. The detailed results of hypothesis testing are summarized in Table 6.

Table 6. Results of Hypothesis Testing

Hypothesis	Relationship	Original Sample	t-value	p-value	Result
H1	Curiosity → Work Engagement	0.252	3.531	0.000	Supported
H2	Curiosity → Proactive Personality	0.586	10.333	0.000	Supported
H3	Proactive Personality → Work Engagement	0.399	5.946	0.000	Supported
H4	Mediation Effect	0.234	6.054	0.000	Supported
H5	Moderation Effect	0.124	1,787	0.074	Not Supported

Overall, the findings suggest that curiosity contributes to work engagement both directly and indirectly through proactive personality, while organizational culture does not significantly influence the relationship between curiosity and proactive personality.

Discussion

Curiosity and Proactive Personality

The results highlight the important role of curiosity in fostering proactive personality, as individuals with higher curiosity levels are more likely to take initiative and actively shape their work environment. This relationship can be understood through the role of curiosity in stimulating exploration, encouraging learning, and fostering openness toward new experiences factors that are closely associated with proactive behavior.

These findings reinforce the view that curiosity functions as an important internal resource that drives self-initiated action. In the context of vocational education, this suggests that curiosity is not merely a cognitive attribute but also a behavioral catalyst that supports adaptability and initiative. Previous studies also support this interpretation, indicating that curiosity promotes proactive tendencies by driving individuals to explore and actively engage with new knowledge (AlShamsi et al., 2025; Kashdan et al., 2018; N. Li et al., 2010). Building on this foundation, more recent empirical work confirms that curiosity directly stimulates proactive knowledge-seeking and work-oriented exploration, with intrinsic motivation acting as a central mechanism linking curiosity to engagement-related conduct (Xu & Tsai, 2025). This resonates with contemporary refinements in proactivity theory, which identify the interplay of personal traits and situational cues as fundamental to understanding how curiosity-driven tendencies become sustained proactive conduct in organizational settings (Crant & Chen, 2024).

Curiosity and Work Engagement

A positive association between curiosity and work engagement is evident, as individuals with higher curiosity levels tend to display greater involvement, energy, and dedication in their work roles. However, the relatively smaller magnitude of this relationship suggests that curiosity alone does not fully explain engagement.

The findings highlight that the relationship between curiosity and work engagement may be shaped by underlying psychological processes that allow individuals to translate their internal drive into ongoing participation in their work. In line with this interpretation, previous studies have shown that curiosity enhances engagement primarily through intrinsic motivation and continuous learning orientation (AlShamsi et al., 2025; Grossnickle, 2016). Moreover, engagement originating from intrinsic sources

like curiosity has been shown to cascade into broader positive workplace behaviors, attesting to the significance of this motivational pathway (Nguyen & Petchsawang, 2024).

Proactive Personality and Work Engagement

The results demonstrate that proactive personality plays a crucial role in driving work engagement, as individuals with proactive characteristics are more inclined to take initiative, pursue improvement opportunities, and actively shape their work environment.

The Job Demands–Resources (JD-R) theory suggests that proactive individuals are better able to mobilize and make use of available job resources, which ultimately contributes to higher levels of work engagement. This finding supports previous research indicating that proactive behavior enables individuals to create favorable work conditions that promote engagement (Bakker & Demerouti, 2017; Crant, 2000). Contemporary extensions of JD-R theory further indicate that the motivational dynamics underlying engagement now encompass proactive self-regulation, in which workers not only respond to existing resources but actively construct and expand them (Demerouti & Bakker, 2023). Recent empirical investigations in educational settings reinforce this picture, confirming that proactive personality substantively predicts teacher engagement by converting individual initiative into sustained occupational involvement (Siregar et al., 2025). Evidence from Indonesian organizational contexts additionally affirms that this dispositional attribute meaningfully predicts work attitudes and behavioral outcomes, reinforcing its relevance for engagement and commitment within institutional environments (Sridadi et al., 2024).

The Mediating Role of Proactive Personality

An important contribution of this study is the recognition of proactive personality as an intervening mechanism connecting curiosity and work engagement, demonstrating that the influence of curiosity operates through both direct and indirect pathways via proactive behavior.

In this process, curiosity can be viewed as an internal motivational force that encourages individuals to explore and learn, while proactive personality represents the behavioral manifestation of that motivation. Through proactive actions, individuals are able to convert their curiosity into meaningful engagement in their work. This mediating pattern mirrors findings from prior research confirming that proactive personality channels individual characteristics into engaged occupational behavior, underscoring the function of behavioral dispositions as essential bridges between psychological antecedents and work outcomes (Bai et al., 2022). Further corroboration comes from studies showing that proactive personality mediates the relationship between personal dispositions and job performance outcomes, with work engagement as the critical pathway through which proactive characteristics generate observable professional effects (Zahra & Kee, 2021).

The Moderating Role of Organizational Culture

Contrary to expectations, organizational culture did not function as a meaningful moderator of the curiosity–proactive personality relationship, implying that curiosity's influence on proactive behavior may be relatively context-independent within this particular environment.

Viewed through an interactionist lens, this null finding suggests that dispositional traits curiosity in particular may hold greater influence than environmental conditions in specific organizational contexts. One plausible account is that cultural variation across institutions was not sufficiently pronounced to generate a discernible moderating signal. Alternatively, curiosity, being deeply internalized, may produce proactive behavior with relative consistency regardless of surrounding conditions. This pattern parallels findings from related organizational research in which contextual variables such as organizational climate similarly failed to moderate the connection between proactive personality and behavioral outcomes, suggesting that individual dispositions can operate with a degree of autonomy from organizational context (Dai et al., 2024). Converging evidence indicates that organizational factors' contribution to work engagement diminishes appreciably once personal characteristics are accounted for, reinforcing the view that dispositional attributes tend to dominate over contextual influences in shaping engagement-related outcomes (Prieto-Díez et al., 2022). From a theoretical standpoint, trait activation theory provides a fitting explanation: personality traits manifest in behavior only when situational cues are sufficiently salient to activate them; where organizational culture does not generate strong or relevant activating cues, dispositions like curiosity may express themselves independently of that contextual factor (Tett & Burnett, 2003b).

These results indicate that contextual factors play a situationally contingent rather than universally dominant role in shaping behavior, contributing nuanced insight into the boundary conditions of environmental influence. This aligns with prior scholarship demonstrating that personal attributes can, under particular circumstances, outweigh organizational conditions as behavioral determinants (AlShamsi et al., 2025; Crant, 2000).

Overall Interpretation

Overall, the results enhance understanding of how work engagement is formed in vocational education settings, with the strong association between curiosity and proactive personality highlighting the key role of intrinsic motivation in promoting proactive behavior.

Curiosity emerges not merely as a knowledge seeking disposition but also as a motivational force that prompts initiative and adaptation to evolving demands. This quality is especially pertinent in vocational education, where adapting continuously to technological change is a professional imperative and where personal resources and proactive orientations become particularly vital for sustaining engagement under heightened job pressures (Demerouti & Bakker, 2023). Findings from moderated mediation studies additionally affirm that proactive personality reliably forecasts adaptive behavioral outcomes across diverse organizational conditions, reinforcing its status as a stable dispositional resource that functions with relative independence from contextual moderators (H. Li et al., 2024).

The findings further highlight the pivotal mediating role of proactive personality, demonstrating that engagement emerges through a process in which internal motivation is transformed into visible behavioral action rather than flowing directly from individual traits. This underscores the critical function of behavioral mechanisms in connecting psychological dispositions to concrete work outcomes.

The non-significant moderating effect of organizational culture further suggests that curiosity exerts its influence with relative consistency across varying institutional environments, which emphasizes the comparatively greater and more stable influence of individual psychological traits when contrasted with contextual variables.

CONCLUSION

Findings

This study set out to explore how curiosity influences work engagement, while considering the roles of proactive personality as a mediating mechanism and organizational culture as a moderating factor among vocational educators.

The results indicate that curiosity contributes meaningfully to both proactive personality and work engagement. More importantly, proactive personality emerges as a key pathway through which curiosity is translated into active involvement in work. The findings imply that curiosity reaches its full impact only when it is translated into proactive behaviors that motivate individuals to take initiative and actively influence their work environment.

In contrast, the expected moderating role of organizational culture is not supported. This finding implies that the relationship between curiosity and proactive behavior may function relatively independently of contextual conditions in this setting. The findings emphasize that individual psychological attributes may exert a greater influence than organizational factors in determining the behavior of vocational educators.

Overall, the study emphasizes the importance of internal psychological drivers and proactive behavioral processes in fostering work engagement. Taken together, the findings indicate that work engagement is strongly influenced by internal psychological mechanisms and proactive behavioral processes.

Implication

Theoretical Implications

This research provides additional insight into how curiosity shapes work engagement by uncovering the underlying processes involved. The findings demonstrate that the relationship is not primarily direct, but instead operates through proactive personality as an intervening mechanism. This highlights the importance of behavioral processes in explaining how intrinsic motivation is transformed into meaningful work involvement.

The absence of a significant moderating effect of organizational culture also provides a nuanced perspective on the Interactionist Perspective Theory. Despite the theoretical view that behavior emerges from the interaction between individual and contextual factors, the findings reveal that individual characteristics, such as curiosity, may exert a more consistent influence across certain contexts. This suggests that contextual effects may not always be dominant and can vary depending on the institutional environment.

Furthermore, this study contributes to the broader integration of intrinsic motivation theory and interactionist perspectives by demonstrating that the relationship between internal traits and external conditions is not always reciprocal. Instead, individual psychological attributes may independently drive behavioral outcomes. The findings enhance understanding of the dynamic interplay between personal and contextual factors in determining work engagement.

Practical Implications

Given that proactive personality emerged as the key pathway through which curiosity translates into work engagement, vocational institutions under Indonesia's Ministry of Industry (Kemenperin) should prioritize interventions that convert curiosity into concrete proactive behavior. Practical steps may build on existing frameworks already implemented within Kemenperin's polytechnic system, such as Project-Based Learning (PBL) schemes paired with Career Development Centers (CDC), industry-linked teaching factories supported by professional certification bodies (LSP, Lembaga Sertifikasi Profesi) and competency test centers (TUK, Tempat Uji Kompetensi), and lecturer internship programs in industry that expose educators to applied problem-solving. Institutions may also expand initiative-rewarding practices consistent with the Industrial-Based Curriculum (IBC) training, in line with the mandate of Presidential Regulation No. 68/2022 on the Revitalization of Vocational Education and Vocational Training, which encourages curricula to remain closely aligned with real industry needs. (Peraturan Presiden Nomor 68 Tahun 2022 Tentang Revitalisasi Pendidikan Vokasi Dan Pelatihan Vokasi, 2022).

While these institutional frameworks provide the structural foundation, educational leaders also play a key role in facilitating these processes by creating an environment that allows experimentation and self-directed action. Although organizational culture as a broader construct was not found to moderate the relationships in this study significantly, leadership-level support for a flexible and adaptive environment remains essential for promoting long-term engagement.

Limitations and Future Research

The findings should be interpreted with several limitations in mind. In particular, the use of a cross-sectional design does not allow for causal conclusions to be drawn, highlighting the need for future research to apply longitudinal methods to better capture temporal changes and interactions among variables.

In addition, the focus on vocational educators within a specific institutional environment may constrain the extent to which the findings can be generalized to broader contexts. Further research could examine different sectors or cultural environments to determine whether the observed relationships are consistent across contexts.

The absence of a significant moderating effect of organizational culture highlights the need to explore alternative contextual variables, with future research encouraged to examine factors such as leadership style, organizational support, and work climate to better understand environmental influences on proactive behavior.

The dependence on self-reported data may also introduce bias, highlighting the need for future studies to utilize multiple data sources such as supervisor evaluations or objective performance indicators to improve the robustness of the findings. Further research could expand this model by examining additional mediating variables, such as job crafting and psychological empowerment, to gain a more comprehensive understanding of how curiosity contributes to work engagement, while also exploring different combinations of mediators and moderators to better capture the interaction between individual and contextual influences.

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***Mega Kumala Ratna (Corresponding Author)**

Magister Manajemen, Faculty of Economics and Business,
Universitas Sebelas Maret
Jl. Ir. Sutami 36A, Kentingan, Jebres, Surakarta 57126
Email: megakumala88@student.uns.ac.id

Hunik Sri Runing Sawitri

Magister Manajemen, Faculty of Economics and Business,
Universitas Sebelas Maret
Jl. Ir. Sutami 36A, Kentingan, Jebres, Surakarta 57126
Email: hunikstri_fe@staff.uns.ac.id
