

Big Five Personality Traits as a Catalyst for Instructional Competency: A Scoping Review in Educational Leadership

Erna Suwardi*, Muhamad Suhaimi Taat., Roslee Talip., Mohd Sobrye Paimin

Faculty of Education and Sport Studies, Universiti Malaysia Sabah, Malaysia

*Corresponding Author

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ABSTRACT

Leadership competencies are becoming increasingly critical in education, particularly as institutions respond to shifting pedagogical paradigms and complex learning environments. While various leadership styles have been widely examined, the role of individual personality traits, specifically the Big Five Personality Traits (B5PT), in shaping instructional competency remains underexplored. This scoping review systematically maps empirical studies from 2020 to 2025 that investigate the influence of B5PT on instructional competency in educational contexts. Guided by Arksey and O'Malley's six-stage framework, relevant literature was sourced from Scopus, Web of Science (WoS), and ERIC databases. Traits such as conscientiousness and emotional stability were consistently associated with effective instructional competency. However, findings on openness were mixed, with some studies linking it to pedagogical innovation and risk-taking, while others reported non-significant or even negative associations with instructional outcomes. Thematic analysis revealed four overarching domains of influence: work empowerment, attitude, behaviour, and management support. These findings offer both theoretical insights and practical implications for leadership development, underscoring the potential of personality-informed strategies to enhance instructional effectiveness.

Keywords: Big Five Personality Traits, Instructional Competency, Educational Leadership, Scoping Review, Personality Psychology, Educational Management

INTRODUCTION

The 21st century educational landscape has expanded the expectations placed on school leaders. Beyond administrative efficiency, they are now expected to possess strong instructional competencies to drive teaching and learning outcomes. Instructional competency encompasses the ability to influence pedagogical direction, support teacher growth, and ensure student success. Increasingly, scholars suggest that personality traits, particularly those in the Big Five model, play a critical role in shaping effective leadership styles (Grover & Amit, 2024; Lopez-Perry, 2020). For instance, Shahzad et al. (2021) demonstrated that extraversion and openness significantly predict authentic leadership behaviours in schools. Similarly, Muhammad and Hayyo (2020) noted that Big Five traits, particularly conscientiousness and extraversion, are strong predictors of leadership effectiveness among school principals. In support of these findings, Ali Assiri (2024) emphasized that teacher personality traits, especially openness and emotional stability, play a vital role in enhancing student learning experiences and classroom engagement. This highlights their broader impact on instructional effectiveness (Assiri, 2025). Collectively, these findings imply that instructional competency may not solely be a learned skill. It also serves as a function of intrinsic personality dimensions.

The Big Five Personality Traits (B5PT), extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience, have consistently emerged as predictors of leadership effectiveness across various domains. In education, these traits are increasingly linked to teacher and leader effectiveness. For instance, Zadok and Benoliel (2023) discovered that openness and agreeableness in school leaders were associated with stronger teacher engagement. Meanwhile, Li et al. (2024) emphasized conscientiousness and emotional stability as key traits for successful leadership training outcomes. Mauleon et al. (2024) added that Big Five

traits shape academic self-regulation in learners, highlighting their educational relevance. Khalid and Zarizi (2022) observed that personality traits, particularly conscientiousness, significantly influence the transfer of instructional strategies among teachers. Similar findings were reported by Ebrahimi and Mousavi (2023), Shrestha and Dangol (2020), as well as Tauseef et al. (2024), who collectively affirmed the role of conscientiousness in shaping pedagogical practices. While the trait of openness is often linked to creativity, innovation, and instructional adaptability, emerging research presents inconsistent findings regarding its actual impact on instructional effectiveness. Notably, although several studies highlight openness as a key enabler of pedagogical risk-taking and trust-building (Ali Assiri, 2024), others have mentioned that non-significant or even negative relationships between openness and instructional outcomes (Akpur, 2024; Dhillon & Kaur, 2023; Durak, 2022). Together, these divergent findings suggest that the role of openness in instructional competency may be more context-dependent than previously assumed, thus warranting deeper examination.

Numerous studies confirm that traits such as extraversion, openness, and conscientiousness predict instructional leadership and pedagogical strategies (Shahzad et al., 2021; Muhammad & Hayyo, 2020; Khalid & Zarizi, 2022; Ebrahimi & Mousavi, 2023; Tauseef et al., 2024). While openness is often linked to innovation and adaptability, its impact on instructional competency outcomes remains mixed. Some studies report significant positive effects (Ali Assiri, 2024; Mohd Nasir et al., 2024), while others observe non-significant or even negative relationships (Akpur, 2024; Dhillon & Kaur, 2023; Durak, 2022), suggesting context-sensitive interpretations.

Despite a growing interest in leadership psychology, the intersection of personality traits and instructional competency remains underexplored. Many leadership studies tend to generalize outcomes or exclude education-specific contexts. However, research by Zadok and Benoliel (2023) revealed that agreeable and open leaders foster greater instructional commitment from teachers. Recent studies have proven that neurotic traits, particularly angry hostility, are linked to inconsistent and ineffective leadership behaviours, such as abusive and laissez-faire leadership styles, which negatively influence instructional environments (Martinussen et al., 2023; Scholarworks et al., 2020). Assiri (2024) reported that openness and conscientiousness facilitated trust-building and decision-making among department chairs. These findings affirm that personality not only acts as a background variable but also contributes directly to instructional competency behaviours.

In this review, instructional competency is defined as the professional ability of school leaders, particularly assistant headteachers, to guide teaching and learning effectively. It includes lesson planning, teacher support, classroom observation, and constructive feedback that improves student learning. This definition draws on Malaysia's KOMPAS 2.0 model, which identifies four key domains: (1) leading curriculum implementation, (2) fostering a research culture, (3) monitoring teaching quality, and (4) integrating digital tools to enhance learning.

This review adopts a contextualised lens that moves beyond Western frameworks of instructional supervision and walkthroughs. By using KOMPAS 2.0 as its foundation, it offers an operational anchor for analysing how B5PT influence instructional practices in Malaysian schools. As such, the scoping review aims to systematically map empirical studies from 2020–2025 on the relationship between B5PT and instructional competency, identify theoretical and methodological trends, and propose implications for policy and leadership development.

LITERATURE REVIEW

Big Five Personality Traits and Instructional Competency in Educational Leadership

Instructional competency today extends beyond administrative duties. It requires a strong understanding of human behaviour and personality. While traditional leadership studies have emphasized behavioural or situational models, research integrating the B5PT (extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience) into instructional competency remains limited. Each trait contributes differently to leadership performance. For example, conscientiousness supports planning and goal-setting, openness fosters innovation in pedagogy, and agreeableness strengthens team cohesion. These traits collectively shape how educational leaders manage instruction, mentor teachers, and respond to organizational demands (Grover &

Amit, 2024). Furthermore, extraversion has been linked to effective communication and vision-sharing (Shahzad et al., 2021). As such, lower neuroticism correlates with emotional stability and resilience under pressure. These findings indicate that personality should be viewed as a psychological profile and determinant of instructional competency Lopez-Perry (2020), especially in complex academic environments (Ali Assiri, 2024).

The significance of personality traits in educational leadership is increasingly recognised, especially in explaining the complex dynamics between leaders and instructional teams. Conscientiousness, in particular, is often linked to consistency, reliability, and accountability, qualities vital to performance-driven institutions (Assiri, 2024). In addition, openness to experience also fosters curriculum innovation and pedagogical experimentation. Yasir et al. (2024) associated openness with greater readiness for change, while Ghafar et al. (2022) linked it to knowledge sharing and the development of new instructional models. Agreeableness contributes to positive interpersonal climates, reducing staff turnover and encouraging collaboration (Mauleon et al., 2024). Meanwhile, extraversion enhances leaders' ability to communicate vision and energise professional learning communities (Li et al., 2024). Cooper et al. (2023) added that when Emotional Intelligence (EI) aligns with personality strengths, it significantly boosts instructional competency effectiveness.

Despite encouraging findings, a clear gap persists in the literature regarding the direct relationship between B5PT and instructional competency competencies, such as classroom supervision, pedagogical leadership, and data-informed decision-making. While several studies acknowledge the contribution of personality traits to general leadership outcomes Jia (2024), few explicitly examine their influence on instructional tasks. For example, (Mohd Nasir et al., 2024) examined how openness and conscientiousness influence transformational leadership among student leaders in Malaysian universities, highlighting the role of personal reflection and interpersonal engagement in leadership development. Likewise, although Cooper et al. (2023) explored the interaction between EI and personality traits, their study did not address implications for instructional competency. As such, a focused scoping review on the interplay between personality and instructional competency in educational contexts is both timely and necessary (Mauleon et al., 2024).

To address this critical gap in the literature, the present study conducts a scoping review to investigate how the B5PT, which include openness, conscientiousness, extraversion, agreeableness, and neuroticism shape instructional competency competencies across diverse educational settings. Previous studies have primarily focused on leadership roles, administrative duties, and pedagogical frameworks. However, emerging evidence indicates that internal personality traits substantially influence leadership behaviours, decision-making processes, and overall effectiveness within educational institutions (Assiri, 2024). Notably, traits such as conscientiousness and emotional stability are consistently linked to sustained instructional focus and improved team performance (Shahzad et al., 2021).

Drawing on a thematic analysis approach, this review synthesizes empirical and theoretical developments to understand how personality constructs interact with instructional competency across contexts. The mapping of this literature not only reveals dominant patterns and conceptual overlaps but also exposes inconsistencies in research methods and theoretical interpretations. As the field of educational leadership increasingly intersects with personality psychology, a clearer understanding of this relationship becomes essential to support future investigations and deepen theoretical discourse (Grover & Amit, 2024). This also aligns with findings from Li et al. (2024) and Woods (2021), who highlighted the practical implications of integrating psychological profiling in leadership development.

MATERIALS AND METHOD

A scoping review is appropriate for mapping prior studies, especially when exploring emerging trends or new relationships, such as those between personality traits and instructional competency. This approach consolidates evidence from past literature and highlights knowledge gaps and underexplored dimensions in contemporary educational leadership studies (Li et al., 2024). Unlike systematic reviews, which follow strict methodological criteria, scoping reviews offer flexibility in accommodating diverse study types and research designs (Grover & Amit, 2024). This study adopts the six-stage framework by Arksey and O'Malley (2005) to

comprehensively review how B5PT is studied in relation to instructional competency in educational leadership settings.

Step 1: Identifying the research question. The central aim of this scoping review is to explore how the B5PT influences instructional competency in educational leadership. Accordingly, the following guiding questions were developed:

- (1) What is the nature of the relationship between B5PT and instructional competency?
- (2) Which personality traits are most frequently associated with effective instructional competency?
- (3) What themes emerge from the existing literature on personality-driven instructional competency in education?

These questions helped define the scope and focus of the literature selection process and thematic synthesis. In the Malaysian primary school context, Assistant Headteachers serve as middle leaders who are directly responsible for supervising the implementation of instructional competency among teachers. As such, this review focuses on the potential influence of personality traits on the capacity of Assistant Headteachers to practise instructional competency in alignment with the KOMPAS 2.0 model.

Step 2: Identifying relevant studies. To ensure comprehensive coverage, searches were conducted across three major academic databases: Web of Science (WoS), Scopus, and ERIC. These platforms were selected for their inclusion in high-impact journals in education, psychology, and leadership. Boolean search strings were applied, combining terms such as: “Big Five Personality Traits” AND “instructional leadership” OR “instructional competency” OR “educational leadership.” The search was restricted to peer-reviewed journal articles published between 2020 and 2025, and only English-language publications were included. Reference mining of the selected studies was also performed to identify additional relevant articles that were not captured through the database queries.

Step 3: Study selection. Inclusion and exclusion criteria were clearly defined to refine the list of articles for analysis. Studies were included if they (1) explicitly examined one or more B5PT, (2) focused on educational leaders or instructional contexts (e.g., principals, academic department heads), and (3) were empirical research articles. Studies were excluded if they were conceptual papers, books, book chapters, conference proceedings, or publications outside the field of education. A total of eleven eligible articles were selected and imported into Microsoft Excel for data charting and thematic analysis. Figure 1 presents the article selection process. While the search strategy did not exclude qualitative or mixed-method designs, all eleven articles that met the inclusion criteria were quantitative in nature. This absence of qualitative contributions limits the depth of contextual insight that such methods typically offer. Accordingly, future research is encouraged to employ interviews, case studies, or ethnographic approaches to provide a richer, more nuanced understanding of how personality traits influence instructional competency.

Step 4: Charting the data. Data from the selected studies were extracted and organized into an Excel spreadsheet for comparative analysis. Key variables recorded included author(s), year of publication, country, study design, sample characteristics, personality traits studied, instructional outcomes measured, and key findings. To aid in thematic analysis, a table was developed to identify recurring patterns, dominant personality traits, and links to instructional competencies (see Table 1). This structured dataset served as the foundation for identifying thematic categories and interpreting the relationships across studies.

Step 5: Collating, summarizing, and reporting results. Thematic analysis was employed to identify common themes, such as “personality and classroom management,” “trait-based decision-making,” and “instructional innovation linked to openness.” Studies were grouped according to the traits examined and the instructional competencies discussed. Both similarities and divergences in research approaches and findings were considered. Figures 2 and 3 present visual summaries of the distribution of traits and types of competencies covered in the literature. These visuals and tables provide a clear overview of the current academic discourse.

Step 6: Interpreting the findings. The findings were interpreted in relation to the guiding research questions. The discussion elaborates on how each personality trait contributes to instructional competency and identifies recurring gaps, such as the limited focus on under-researched traits like neuroticism and the lack of studies conducted in non-Western educational contexts. Methodological limitations, including heterogeneity of research designs and potential sample biases, are also acknowledged. Finally, the review offers recommendations for future research, including the need for deeper qualitative investigations and cross-cultural validation. These efforts aim to support the development of evidence-based leadership programmes that integrate personality profiling into instructional competency training.

FINDING

A comprehensive search across leading academic databases, namely Scopus, WoS, and ERIC, initially yielded 148 articles potentially relevant to the focus of this scoping review. This broad initial yield reflects the growing academic interest in the relationship between personality traits and instructional competency within educational settings. The search strategy employed Boolean operators and targeted keywords related to the B5PT, instructional competency, and educational effectiveness. To ensure the rigour and relevance of sources, a stringent set of inclusion criteria was applied. These criteria prioritised empirical studies published between 2020 and 2025, situated within the field of education, and recognised within the social sciences. After the screening process, the final pool was refined to 46 publications deemed most aligned with the conceptual focus of this review.

Subsequently, after assessing the data for redundancy, no duplicate entries were identified within the refined list, resulting in a total of 29 unique articles. This finding was relatively unexpected, as cross-database searches typically yield overlapping records. These articles were then subjected to a more detailed evaluation process aligned with the specific research objectives of this scoping review. The screening involved abstract and full-text reviews, focusing on methodological rigour and thematic alignment with personality traits and instructional competency constructs. As a result, 18 publications were excluded due to thematic misalignment or insufficient focus on the core constructs. The exclusion process eliminated conceptual essays, opinion pieces, and non-empirical literature. Ultimately, 11 articles met all inclusion criteria. These selected studies employed quantitative methodologies and directly addressed the thematic focus of the review, thereby forming the foundation of the scoping analysis, as depicted in Figure 1.

The selection of the final articles was guided by several key screening principles. First, only peer-reviewed journal articles were included, while other types of publications, such as book chapters, conference proceedings, and editorials, were excluded. This criterion ensured the academic credibility and methodological rigour of the selected studies. Peer-reviewed articles are generally more reliable, having undergone thorough scholarly evaluation. For example, the WoS database indexes over 760 million scholarly references across various academic disciplines, providing a robust platform for sourcing high-quality literature. Notably, this extensive repository increases the likelihood of identifying influential and thematically relevant publications within the domain of educational competency. In addition, this rigorous selection process minimises the inclusion of potentially biased or anecdotal findings. Such a systematic approach also enhances the replicability and transparency of the review methodology.

Secondly, the review focused exclusively on studies that employed quantitative research designs. This methodological decision aligns with the broader consensus in educational research that quantitative approaches offer greater reliability, objectivity, and generalisability across diverse learning contexts. The emphasis on statistical validation and replicable findings enabled more robust comparisons across varying educational systems. Moreover, quantitative methods facilitate the identification of measurable relationships between variables, which is crucial for theory testing and policy recommendations. Their structured nature also enhances comparability across studies conducted in different socio-cultural settings. Thirdly, only empirical studies published in English were included to maintain consistency in analysis, interpretation, and reporting. While this language restriction may have excluded potentially valuable non-English contributions, it ensured clarity in data synthesis and minimised the risk of misinterpretation during the review process.

Of the final eleven selected articles, seven were indexed in Scopus, two in WoS, and the remaining two in ERIC. This distribution affirms both the academic credibility and disciplinary relevance of the reviewed studies, highlighting the robustness and cross-database consistency of the selected literature. Furthermore, the presence of articles across these three reputable indexing platforms strengthens the representativeness of the review and underscores the interdisciplinary nature of research examining the nexus between personality traits and instructional competency. Collectively, these studies provide a credible foundation for identifying thematic patterns, methodological orientations, and potential future directions in the field. Their inclusion also reflects rigorous editorial standards and peer-review processes, which enhance the reliability of their findings. Such quality assurance is essential for building a robust knowledge base that informs both academic discourse and educational practice.

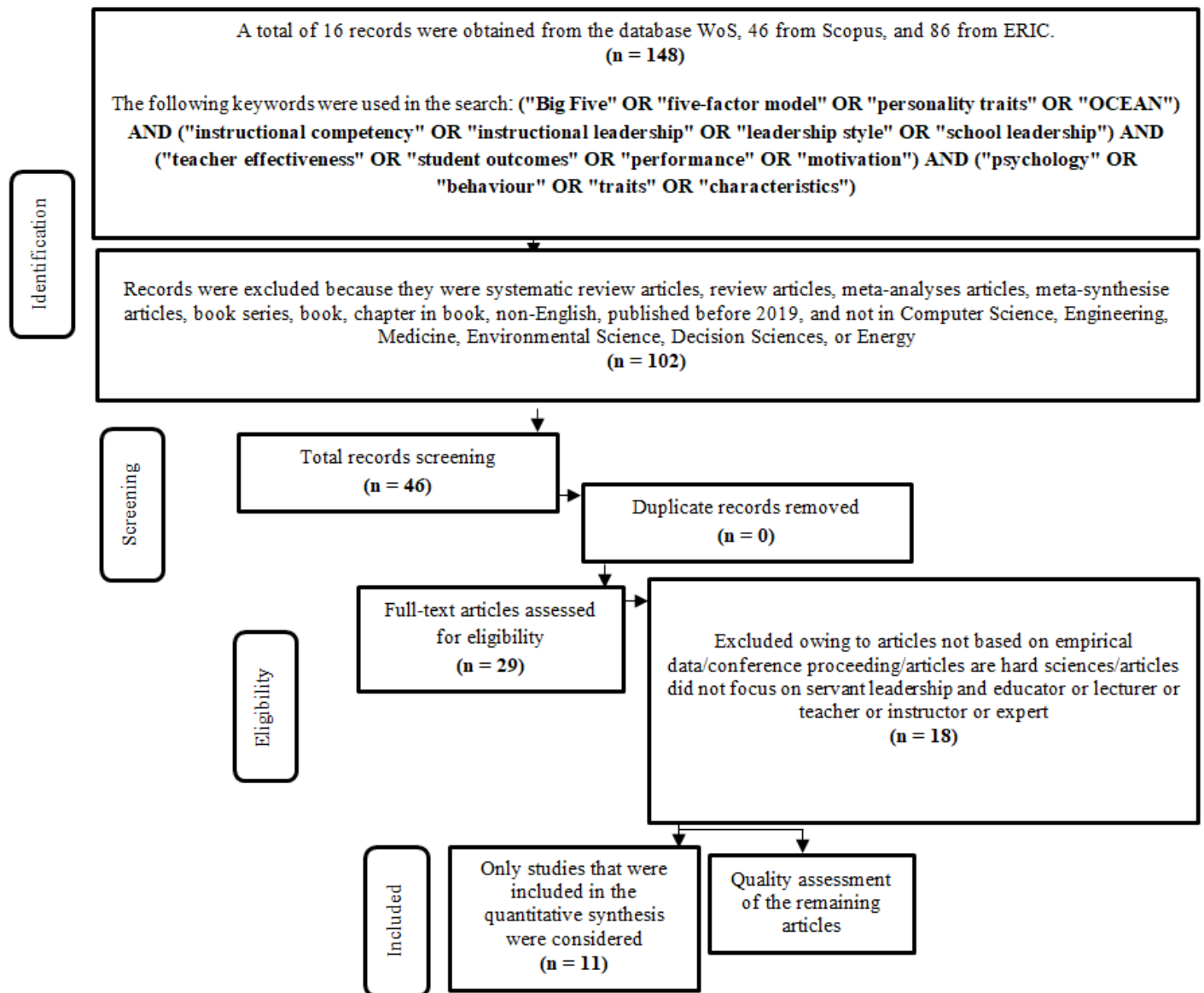


Figure 1. Flow diagram of research selection process using Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, adapted from Moher et al. (2009)

Table 1 presents the ten research publications that were selected for this scoping review based on the inclusion criteria outlined previously. The review results indicate that personality traits, particularly conscientiousness, openness, and agreeableness, are consistently associated with higher instructional competency. Across multiple studies, these traits influenced key leadership behaviours such as classroom management, instructional decision-making, and engagement with school stakeholders.

In particular, conscientiousness emerged as a recurring trait that enhances strategic planning, goal setting, and organizational performance in educational settings. Meanwhile, openness was frequently linked to innovation

in instruction and adaptability to change, supporting creative pedagogical approaches. Although extraversion and agreeableness also appeared beneficial, their effects were more context-dependent, particularly in relation to team collaboration and relational leadership. Interestingly, neuroticism was either underexplored or demonstrated to have a negative correlation with leadership outcomes, suggesting a potential gap in the literature. Overall, the selected studies confirm that Big Five personality dimensions contribute meaningfully to instructional competency effectiveness, with implications for leadership training, teacher recruitment, and policy development.

To explore the second research question, which investigates the primary dimensions of instructional competency shaped by personality traits, this scoping review developed a thematic framework comprising four overarching themes and eleven related sub-themes. These themes were systematically derived from the thematic analysis of ten selected empirical studies, each examining the interplay between the B5PT and instructional competency attributes in various educational settings. Additionally, the coding and synthesis process revealed recurring conceptual patterns, allowing for the identification of dominant constructs that transcend methodological and geographical differences.

The first theme, *work empowerment* (sub-themes: *work influence*, *work feelings*), captures how specific personality traits, most notably conscientiousness and agreeableness, support leadership practices that promote psychological safety, mutual recognition, and equitable task delegation. These attributes collectively create an empowering instructional competency environment where team members feel valued and supported.

The second theme, *attitude* (sub-themes: *self-attitude*, *self-determination*, *self-belief*), encapsulates the cognitive-affective characteristics shaped by personality that influence a leader's confidence, autonomy, and internal motivation. Traits such as emotional stability and openness were often associated with leaders who demonstrate resilience, clarity in decision-making, and a positive orientation toward professional challenges.

The third theme, *behaviour* (sub-theme: *behaviour formation*), centers on the behavioural consistency and visibility of instructional leaders. The findings indicate that certain traits, particularly conscientiousness and extraversion, are instrumental in fostering habitual leadership behaviours such as initiative-taking, instructional modelling, and setting professional standards for teaching and learning.

The fourth theme, *management support* (sub-themes: *problem-solving*, *team support*, *motivation*, *loyalty encouragement*, *potential development*), refers to the supportive functions performed by instructional leaders, shaped by traits like agreeableness and openness. These leaders excel in fostering professional growth, maintaining team motivation, and resolving conflicts constructively to sustain a high-performing instructional culture.

Table 1 provides a synthesized overview of the ten reviewed articles, categorizing each study according to the corresponding themes and sub-themes. This structured mapping illustrates how the B5PT is linked to core instructional competency across different contexts and study designs.

Table 1. Charting the data

Author / Year	Variables/ Construct	Influence of Big Five Traits on Instructional Competency	Sub-Theme	Theme
(Hajnci & Vučenović, 2020)	IV: Big Five Traits (Openness, Conscientiousness, Agreeableness) Mediator: Leadership Styles (Transformational and Asta Brata) DV: Work Performance	The study revealed that personality traits such as openness, agreeableness, and conscientiousness have a substantial influence on work performance among academicians. These traits function through leadership style mediation, particularly transformational and Asta Brata styles. This indicates that positive personality traits can foster a supportive and productive academic environment.	Leadership styles as the mediator	Big Five Traits and Mediated Leadership Influence

(Roemer et al., 2022)	IV: Big Five Personality Traits (Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism); DV: Teacher Work Performance	The study reported that conscientiousness, agreeableness, and openness positively affected teacher performance, while neuroticism presented a negative correlation. This supports the claim that Big Five traits are important predictors of teachers' instructional capacity and work effectiveness.	Teacher Personality Traits and Performance	Big Five Traits and Instructional Competency
Author / Year	Variables/ Construct	Influence of Big Five Traits on Instructional Competency	Sub-Theme	Theme
(Shah et al., 2023)	IV: Extroversion (Big Five Trait) DV: Organisational Management (School Leadership Effectiveness)	Findings indicated that extroverted school principals were more effective in organizational management. These leaders displayed a clear vision, delegated responsibilities efficiently, and promoted collaborative practices. This suggests that extroversion supports better instructional competency and school performance.	Extroversion and school leadership	Extroversion in Educational Leadership
(Setiyowati et al., 2024)	IV: Personality Traits (Conscientiousness, Emotional Stability) DV: Transformational Leadership Additional Variable: Emotional Intelligence	Results mentioned that conscientiousness and emotional stability significantly predicted transformational leadership. While EI added only marginal explanatory power, personality traits remained strong predictors of leadership competency. This implies that internal personality disposition shapes leadership effectiveness in academic settings.	Personality and leadership predictors	EI, Personality and Leadership in Educational Settings
(Maamari, 2024)	IV: Emotional Intelligence Mediator: Personality Traits DV: Teaching Effectiveness	The study reported that teacher personality traits significantly mediate the relationship between EI and teaching effectiveness. Teachers with high EI and favorable personality traits demonstrated higher instructional effectiveness. This is especially true in post-COVID learning environments where emotional control and adaptability are critical.	Teacher EI and Mediating Personality Traits	Big Five Traits and Instructional Competency
(Assali, 2025)	IV: Teacher personality traits (e.g., Big Five) DV: Student learning experience and engagement	The study highlighted that teacher personality traits, especially openness and emotional stability, play a central role in shaping student learning experiences beyond what curriculum and pedagogy alone can achieve. Personality influenced classroom climate, student motivation, and overall engagement.	Teacher Personality Impact on Student Engagement	Educational Climate and Teacher Effectiveness
(Woods, 2021)	IV: Big Five Personality Traits, Contextual (social and work) environment DV: Behavioural	The study explored how B5PT is expressed in different social and work contexts, emphasizing the role of dynamic environments in shaping behavioural competencies essential for instructional leadership.	Contextual Personality Activation	Trait-Based Leadership in Organizations

	competencies essential for instructional leadership			
Author / Year	Variables/ Construct	Influence of Big Five Traits on Instructional Competency	Sub-Theme	Theme
(Zhang & Wong, 2024)	IV: Big Five Personality DV: Collaborative Learning outcomes/ Performance in technology-supported settings	The paper revealed how Big Five traits influence collaborative learning outcomes. This indicates that certain traits, such as conscientiousness and openness, correlate positively with performance in technology-supported educational settings.	Trait-Driven Learning Performance	Personality and Digital Instructional Competency
(Khalid & Zarizi, 2022)	IV: Big Five Personality Traits; DV: Teaching Performance	The study discovered a significant and positive relationship between conscientiousness and openness and teaching performance, suggesting that teachers' personality traits predict instructional success.	Trait-based Teacher Leadership	Personality and Instructional Competency
(Cornelissen & Smith, 2022)	IV: Principal Personality Traits (Big Five); DV: School Climate	The study observed that conscientiousness and openness in principals significantly improved the school climate as perceived by teachers. These traits indirectly supported a positive teaching and learning environment conducive to instructional leadership.	Principal Traits and School Climate	Personality and Instructional Environment
(Tarsianer et al., 2021)	IV: Big Five Personality Traits (Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism); DV: Teachers' Job Performance	The study noted that conscientiousness and agreeableness were strong predictors of teacher job performance. Neuroticism revealed a negative relationship. This suggests that certain personality traits within the Big Five significantly enhanced instructional performance and overall teaching effectiveness.	Teacher Personality and Job Effectiveness	Big Five Traits and Instructional Competency

Background of the Research Included in the Review

This scoping review incorporated eleven empirical studies published between 2020 and 2025. The selection was sourced from Scopus, WoS, and ERIC databases, which aligned with the inclusion criteria. Figures 2 and 3 illustrate the geographical and temporal distribution of these studies, addressing the third research question concerning the nature and scope of the reviewed literature. The chosen timeframe reflects a period of growing scholarly attention towards the integration of personality psychology in instructional competency research. This temporal and geographical mapping enables a more nuanced understanding of research concentration, regional disparities, and emerging trends in the field.

Figure 2 indicates that the selected studies originated from nine countries. Notably, Lebanon contributed the highest number with three studies. The remaining countries, namely Indonesia, Malaysia, the United Arab Emirates, Croatia, Germany, the United States, Pakistan, and China, each contributed one. This distribution suggests that research on personality informed instructional competency extends beyond traditionally dominant Western contexts. The presence of both developing and developed countries reflects a growing global interest. However, the concentration in specific regions highlights the need for broader cross national and culturally diverse investigations.

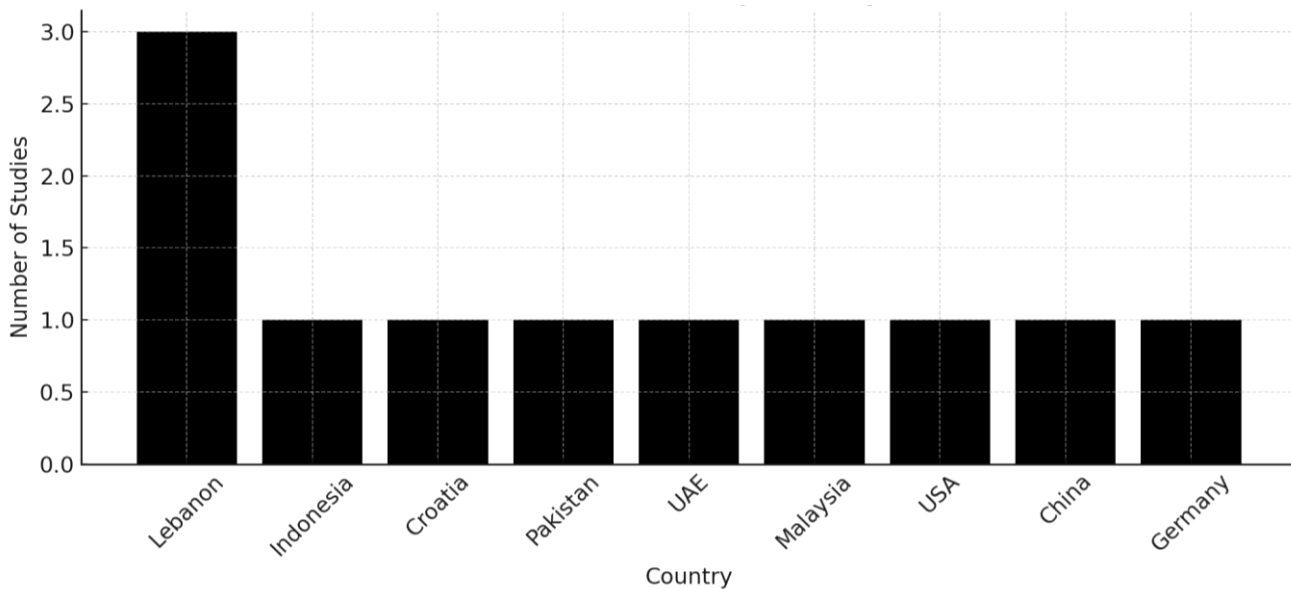


Figure 2. Distribution of reviewed studies by country

Figure 3 displays the year-wise distribution of the selected articles. One study was published in 2020, followed by two in 2021. In 2022 and 2024, the number of publications reached three, representing the peak publication years. Only one article was recorded in both 2023 and 2025. Although the total number of studies remains modest, the consistent publication across six consecutive years indicates growing scholarly interest. This trend reflects an emerging yet evolving field that increasingly acknowledges the influence of psychological traits, particularly the Big Five Personality Traits, on instructional competency.

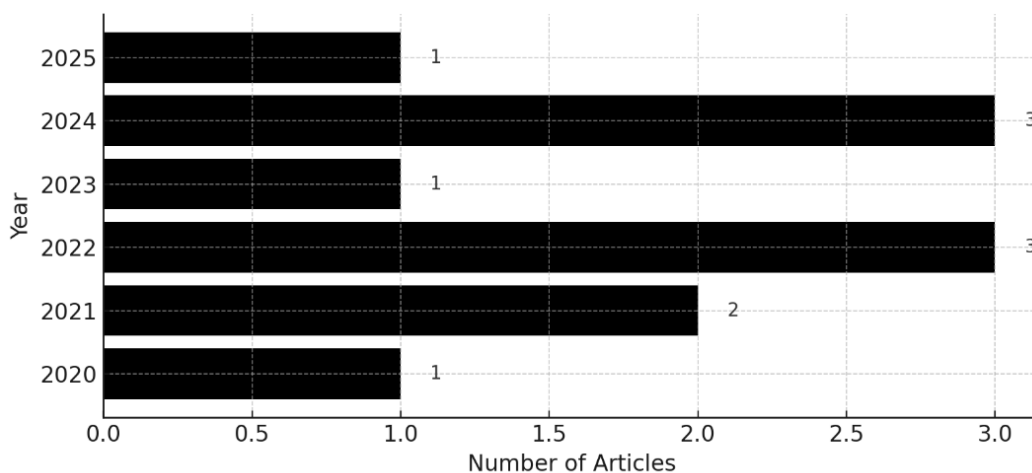


Figure 3. Year-wise distribution of the eleven included articles (2020–2025) from Scopus, WoS, and ERIC databases

DISCUSSIONS

This scoping review synthesised empirical studies to examine how the B5PT influences instructional competency across educational settings. Based on the final selection of eleven articles, four overarching thematic dimensions were identified: work empowerment, attitude, behaviour, and management support. These dimensions reflect the multifaceted ways in which personality traits, particularly conscientiousness, openness, emotional stability, and agreeableness, contribute to instructional effectiveness among educational leaders, including principals, academic staff, and teacher leaders.

From a geographical perspective, Lebanon appeared as the most active contributor in this field, with three studies examining the relationship between personality traits and instructional competency. Other contributing countries included Indonesia, Malaysia, the United Arab Emirates, Croatia, Germany, the United States,

Pakistan, and China, each of which produced at least one study. This reflects a growing global interest in the topic. However, the overall number of studies remains limited, suggesting that this area of research is still in an early phase, particularly within non-Western and developing educational contexts.

In terms of research structure, most studies positioned personality traits as independent variables, while instructional performance, leadership behaviour, or student learning outcomes served as dependent constructs. Several studies also introduced mediating variables, such as leadership styles, emotional intelligence (EI), or school environment, highlighting the multifaceted and interconnected nature of these relationships.

To enhance conceptual clarity, Table 2 categorises the reviewed studies based on the functional role of personality traits and the associated constructs examined.

Table 2. Classification of reviewed studies based on the functional role of personality traits and associated constructs.

	Independent	Mediating	Dependent
Process	Roemer et al., 2022 Shah et al., 2023 Setiyowati et al., 2024	Maamari, 2024 Hajnci & Vučenović, 2020 Khalid & Zarizi, 2022	Woods, 2021
Outcome	Assali, 2025 Zhang & Wong, 2024	—	Tarsianer et al., 2021 Cornelissen & Smith, 2022
Enabler	—	—	—

The process category comprises studies that examine how personality traits influence instructional competency through internal mediators such as leadership styles or emotional intelligence. Meanwhile, the outcome category focuses on the effects of personality traits in shaping performance and engagement. At the same time, the enabler dimension, though less represented, suggests the foundational role of these traits in fostering a supportive leadership ecosystem.

Although many of the reviewed studies focused on general constructs such as teacher effectiveness, leadership behaviour, and instructional performance, these constructs conceptually align with the core dimensions of instructional competency as defined in this review. For example, indicators of teacher effectiveness often include planning lessons, supervising classroom activities, and giving feedback – functions that reflect instructional planning, monitoring, and support. Similarly, leadership behaviour is frequently assessed through actions that promote research use, digital integration, and curriculum alignment, which correspond with domains outlined in the KOMPAS 2.0 framework. Thus, the broader variables used in the reviewed studies can be interpreted as practical proxies for instructional competency. This mapping ensures that the synthesis remains relevant to the Malaysian context, where assistant headteachers are expected to operationalise instructional competency through these specific domains.

Overall, this review underscores the centrality of the Big Five Personality Traits as a predictor of instructional competency. However, inconsistencies in methodological designs and limited contextual diversity remain evident across the reviewed literature. A significant number of studies relied solely on self-reported surveys, with minimal use of longitudinal or mixed method approaches. Thus, future research would benefit from integrating personality assessments with performance based metrics and incorporating cross cultural validations to establish stronger theoretical and practical foundations for leadership development in education.

While the findings affirm the relevance of personality traits in shaping leadership behaviours, a critical gap emerges in the operationalisation of instructional competency. Most studies did not explicitly define or measure instructional competency as a standalone construct. Instead, they focused on broader leadership or educational outcomes, such as teaching effectiveness or academic achievement, without delineating specific instructional dimensions like classroom supervision, data-informed decision-making, or pedagogical leadership. Consequently, the relationship between personality traits and the technical facets of instructional competency remains largely inferred rather than empirically validated.

This conceptual ambiguity complicates efforts to isolate which aspects of instructional competency are most influenced by personality traits. To advance the field, future research should move beyond whether personality matters and investigate how and in what domains personality traits translate into observable instructional behaviours. Such an approach would refine theoretical understanding and inform targeted interventions for leadership development in educational settings. Additionally, this review highlights a methodological gap in the existing literature. While personality traits have been quantitatively examined in relation to instructional competency, the absence of qualitative insights limits contextual interpretations. Future research should consider employing in-depth interviews, case studies, or ethnographic approaches to explore how specific personality traits manifest in real instructional practices. Such approaches may uncover tacit leadership behaviours and contextual nuances that remain hidden in survey-based studies.

LIMITATION AND RECOMMENDATIONS

A key limitation of this scoping review lies in the conceptual mismatch between its intended focus, instructional competency, and the actual variables measured in most of the included studies. Although the review aimed to examine how personality traits influence instructional competency, most studies did not operationalise instructional competency in a direct or granular manner. Instead, they relied on broader constructs such as teacher effectiveness, leadership style, or student outcomes as proxies. This disconnect constrains the precision of any conclusions regarding the specific influence of personality traits on instructional tasks. Future research should, therefore, aim to define instructional competency more explicitly and assess it using targeted indicators such as instructional supervision, curriculum planning, and formative assessment practices.

One notable limitation of this scoping review is its exclusive reliance on three primary academic databases, Scopus, WoS, and ERIC, to source relevant empirical studies. While these platforms are known for indexing high-impact, peer-reviewed literature, the exclusion of other repositories such as SpringerLink, ProQuest, or Google Scholar may have inadvertently omitted pertinent research. This is particularly true for grey literature or studies published in academically rigorous, non-indexed journals. As a result, this limitation may have narrowed the global representation of research on the intersection between personality psychology and instructional competency, especially from underrepresented regions or non-English-speaking contexts.

Furthermore, the time frame of this review was limited to empirical studies published between 2020 and 2025. Although this time frame allows the review to reflect recent developments in the field, it may have excluded foundational or conceptual work that could provide important theoretical grounding. Considering that research linking the Big Five Personality Traits to instructional competency remains emergent, especially in non-Western or developing contexts, future reviews should consider expanding the publication window to capture broader historical trends and enhance comparative analysis.

In terms of methodological scope, this review focused only on quantitative studies. These approaches offer measurable patterns and generalisable trends. However, they may overlook subtle and contextually grounded insights that are more effectively captured through qualitative or mixed method designs.. Using such methodologies in future research could deepen understanding of how personality traits shape instructional practices, leadership identity, and interpersonal dynamics in real educational settings. Accordingly, qualitative and mixed-methods approaches allow researchers to explore lived experiences, cultural contexts, and relational factors that quantitative data alone may not reveal. They also help explain how and why certain personality traits appear differently across leadership roles and school environments. At the same time, a mixed-method framework can improve validity through triangulation, combining statistical results with narrative depth. This strengthens theoretical understanding and supports the creation of more targeted and culturally responsive leadership interventions.

In addition, this review employed thematic analysis without a formal meta-analytical synthesis due to the heterogeneity of study designs, measurement tools, and outcome variables across the included literature. While thematic analysis enabled the identification of broad conceptual categories, namely, work empowerment, attitude, behaviour, and management support, future research may consider employing meta-synthesis or integrative review techniques. Such approaches could quantify effect sizes, assess study consistency, and

further validate theoretical linkages between personality traits and instructional competency within diverse educational contexts.

Finally, there remains a strong need for cross-cultural comparative research. Although the reviewed articles span diverse countries, the overall volume of evidence is still modest. Including data from multilingual and multicultural education systems would improve the generalisability and global relevance of the findings. Hence, scholars should adopt longitudinal and interdisciplinary approaches. These approaches may combine psychological profiling with leadership development strategies to inform future policies and training programmes in educational leadership. Overall, these limitations highlight the need for a more integrative research agenda that connects personality psychology with instructional competency through multi-method, cross-cultural, and pedagogically grounded frameworks.

IMPLICATIONS

This scoping review offers a structured and evidence based synthesis of how the Big Five Personality Traits (B5PT) influence instructional competency within educational settings. Through the analysis of various empirical studies, four key dimensions were identified as conceptual pathways linking personality traits to effective teaching practices. These dimensions are work empowerment, attitude, behaviour and managerial support. The findings indicate that traits such as conscientiousness, openness, emotional stability and agreeableness underpin educator behaviour, institutional climate and team motivation.

Theoretically, this review positions personality traits as a core element in shaping instructional competency. It challenges traditional frameworks that often prioritise technical skills or formal roles. The study proposes a reconceptualisation of educational development models by integrating psychological profiling into existing theoretical frameworks, offering a more comprehensive understanding of how internal dispositions influence professional performance. This shift also opens opportunities for scholars to explore new theoretical linkages between personality traits and systemic outcomes in education.

Practically, the findings offer actionable guidance for teacher education, professional training and school management. Understanding which traits are positively associated with effective instructional competency enables institutions to enhance strategies for recruitment, development and talent mentoring. Personality-based approaches can help educators and school leaders to cultivate behaviours aligned with collaboration, resilience and instructional vision. Furthermore, educational policymakers are encouraged to consider psychological traits as valid indicators of professional potential, thereby broadening assessment criteria beyond academic qualifications or administrative experience alone.

CONCLUSION

This scoping review synthesises how B5PT, especially conscientiousness, openness, emotional stability, and agreeableness, influence instructional competency across educational contexts. These traits are linked to decision-making, team empowerment, and instructional innovation, as well as to self-regulation and a positive school climate. Thematic analysis revealed four core pathways, work empowerment, attitude, behaviour, and management support, through which these traits shape instructional competency. However, most reviewed studies relied on self-reported quantitative methods, lacked cultural diversity, and did not explicitly define instructional competency. These gaps highlight the need for more diverse, context-sensitive, and mixed-method research. Ultimately, this review positions personality traits as vital contributors to effective and human-centred leadership, offering practical insights for educators, researchers, and policymakers in navigating post-pandemic education systems.

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REFERENCE

1. Akpur, U. (2024). The Relationship Pattern Between Personality Traits and Learning Responsibility. Problems of Education in the 21st Century. <https://doi.org/10.33225/pec/24.82.328>
2. Ali Assiri, M. (2024). The Big Five Factors of Personality Traits and Leadership Practices of Academic Department Chairs: A Predictive Study. Center for Educational Policy Studies Journal, February, 1–23. <https://doi.org/10.26529/cepsj.1736>
3. Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. International Journal of Social Research Methodology, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>
4. Assali, M. A. (2025). Beyond curriculum: How teacher personalities shape student learning experiences. Research Journal in Advanced Humanities, 6(1). <https://doi.org/10.58256/6vqes781>
5. Assiri, M. A. (2024). The Big Five Factors of Personality Traits and Leadership Practices of Academic Department Chairs: A Predictive Study. Center for Educational Policy Studies Journal. <https://doi.org/10.26529/cepsj.1736>
6. Cooper, J., Davis, L., & Norton Fred. (2023). A Literature Review of the Influence of Emotional Intelligence (EI) and the Big Five Personality Traits on Leadership Effectiveness. Journal of Leadership, Accountability and Ethics. <https://doi.org/10.33423/jlae.v20i5.6658>
7. Cornelissen, R. P., & Smith, J. (2022). Leadership approaches of principals heading National Strategy Learner Attainment Schools in South Africa. International Journal of Educational Leadership and Management, 10(1), 56–83. <https://doi.org/10.17583/ijelm.7966>
8. Dhillon, N., & Kaur, G. (2023). Impact of Personality Traits on Communication Effectiveness of Teachers: Exploring the Mediating Role of Their Communication Style. SAGE Open, 13. <https://doi.org/10.1177/21582440231168049>
9. Durak, H. Y. (2022). Role of personality traits in collaborative group works at flipped classrooms. Current Psychology (New Brunswick, N.j.), 1–21. <https://doi.org/10.1007/s12144-022-02702-1>
10. Ebrahimi, A., & Mousavi, S. S. (2023). Structural Model of the Effect of Psychological Capital on Innovative Behavior in Teaching: The Mediating Role of Conscientiousness Personality Trait. International Journal of Education and Cognitive Sciences. <https://doi.org/10.61838/kman.ijecs.4.4.1>
11. Ghafar, M., Zarkasyi, A., & Adam, F. M. (2022). Impacts of Openness to Experience on Learning Innovation Model The Moderating Effect of Teacher Knowledge-Sharing. Cendekia: Jurnal Kependidikan Dan Kemasyarakatan. <https://doi.org/10.21154/cendekia.v20i2.4960>
12. Grover, A., & Amit. (2024). The Big Five Personality Traits and Leadership: A Comprehensive Analysis. International Journal For Multidisciplinary Research, 6(1), 1–10. <https://doi.org/10.36948/ijfmr.2024.v06i01.11820>
13. Hajncl, L., & Vučenović, D. (2020). Effects of measures of emotional intelligence on the relationship between emotional intelligence and transformational leadership. Psihologijske Teme, 29, 119–134. <https://doi.org/10.31820/pt.29.1.7>
14. Jia, W. (2024). Study of the Effects of Personality Traits on Team Collaboration and Organizational Performance. Highlights in Business, Economics and Management. <https://doi.org/10.54097/6q5ht075>
15. Khalid, A., & Zarizi, A. (2022). The Level of Job Performance, Job Satisfaction, Personality Traits and Leadership Behaviors That Influence the Performance of the Physical Education Teachers at the Secondary Schools in Selangor. Journal of Management Scholarship, 2(2), 206–216. <https://doi.org/10.38198/jms/1.2.2022.27>
16. Li, M., Javalagi, A., & Newman, D. (2024). Personality and leadership: Meta-analytic review of cross-cultural moderation, behavioral mediation, and honesty-humility. The Journal of Applied Psychology. <https://doi.org/10.1037/apl0001182>
17. Lopez-Perry, C. (2020). Transformational leadership and the big five personality traits of counselor educators. Journal of Counselor Leadership and Advocacy, 7, 132–146. <https://doi.org/10.1080/2326716X.2020.1820406>

18. Maamari, B. E. (2024). The Mediating Role of Teacher Personality on Classroom Teaching Effectiveness in Teaching Today. *Proceedings of International Conference on Research in Education and Science*, 10(1), 2374–2383.
19. Martinussen, M., Skogstad, A., Fosse, T., Martinsen, Ø., Sørli, H., & Einarsen, S. (2023). Neuroticism as an antecedent of abusive supervision and laissez-faire leadership in emergent leaders: The role of facets and agreeableness as a moderator. *Applied Psychology*. <https://doi.org/10.1111/apps.12495>
20. Mauleon, N. M. A., Dasigan, M. A., Pagalaran, M. J., & Sanchez, K. D. (2024). Big Five Personality Traits Predict Academic Self-Efficacy Among Undergraduate College Students. *Journal of Interdisciplinary Perspectives*. <https://doi.org/10.69569/jip.2024.0306>
21. Mohd Nasir, M. A. Z., Ma'rof, A. A., & Rosnon, M. R. (2024). The Influence of Personality Traits on Leadership Styles among Student Leaders in Malaysian Public Universities. *International Journal of Academic Research in Business and Social Sciences*, 14(12), 1050–1066. <https://doi.org/10.6007/ijarbss/v14-i12/24044>
22. Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., Antes, G., Atkins, D., Barbour, V., Barrowman, N., Berlin, J. A., Clark, J., Clarke, M., Cook, D., D'Amico, R., Deeks, J. J., Devereaux, P. J., Dickersin, K., Egger, M., Ernst, E., Gøtzsche, P. C., ... Tugwell, P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6(7). <https://doi.org/10.1371/journal.pmed.1000097>
23. Muhammad, A. S., & Hayyo, D. (2020). Relationship Between Principals' Personality Traits And Leadership Effectiveness. 3, 67–75
24. Roemer, L., Lechner, C. M., & Rammstedt, B. (2022). Beyond Competencies: Associations between Personality and School Grades Are Largely Independent of Subject-Specific and General Cognitive Competencies. *Journal of Intelligence*, 10(2). <https://doi.org/10.3390/jintelligence10020026>
25. Scholarworks, S., Brooker, K., & Brooker, K. (2020). Assessing the Relationship Between Narcissism, Neuroticism, and Leadership Skills
26. Setiyowati, N., Jaafar, J. I. A. L. S., & Razak, A. Z. A. (2024). Personality traits and work performance among academicians in university: leadership styles as a mediator. *International Journal of Evaluation and Research in Education*, 13(4), 2238–2250. <https://doi.org/10.11591/ijere.v13i4.28214>
27. Shah, S. K. A., Butt, M., Khan, A. M., Zeeshan, M., & Aziz, A. (2023). Exploring organizational management of extrovert school leadership. *International Journal of Evaluation and Research in Education*, 12(1), 15–22. <https://doi.org/10.11591/ijere.v12i1.23549>
28. Shahzad, K., Raja, U., & Hashmi, S. D. (2021). Impact of Big Five personality traits on authentic leadership. *Leadership & Organization Development Journal*, 42(2), 208–218. <https://doi.org/10.1108/LODJ-05-2019-0202>
29. Shrestha, M., & Dangol, R. (2020). Conscientiousness and Motivator Factors. *Journal of Information Science and Engineering*, 9, 117–137. <https://doi.org/10.32674/JISE.V9I1.1898>
30. Tarsianer, M. P., Ciriaka, M. G., & Kaberia, I. K. (2021). Influence of personality types, instructional supervision practices, and performance in public primary schools in Kenya. *Educational Research and Reviews*, 16(2), 27–39. <https://doi.org/10.5897/err2020.4108>
31. Tauseef, R. M., Abbas, T., Mufti, A. A., & Anees, R. (2024). Investigating the Link between Specific Personality Characteristics, Such As Conscientiousness and Extraversion, and Career Achievements and Job Satisfaction. *The Critical Review of Social Sciences Studies*. <https://doi.org/10.59075/qmh35798>
32. Woods, S. (2021). Where I am and who I am with: Contextual dynamics of personality in the prediction of work performance. *International Journal of Selection and Assessment*, 30. <https://doi.org/10.1111/ijsa.12355>
33. Zadok, A., & Benoliel, P. (2023). Middle-leaders' transformational leadership: big five traits and teacher commitment. *International Journal of Educational Management*. <https://doi.org/10.1108/ijem-12-2022-0541>
34. Zhang, S., & Wong, G. K. W. (2024). Unravelling the underlying mechanism of computational thinking: The mediating role of attitudinal beliefs between personality and learning performance. *Journal of Computer Assisted Learning*, 40(2), 902–918. <https://doi.org/https://doi.org/10.1111/jcal.12900>