

Impact of Personality Type on Leadership Level of Heads of Departments at University Level

Dr. Beenish Masood¹, Dr. Hasan Zafar², Dr. Saqib Zaigham³

¹ Assistant Professor, English Language Centre, Faculty of Languages and Literature, University of Central Punjab, Lahore, Punjab, Pakistan.

² Assistant Professor of Film & Television, Lahore School of Economics, Lahore, Pakistan

³ Assistant Professor of English, Capital University of Science & Technology (CUST), Islamabad, Pakistan.

DOI: <https://doi.org/10.70670/sra.v4i2.2364>

Abstract

This study investigates the effect of personality type on the leadership level of Heads of Departments (HODs) across public and private universities in Lahore, Pakistan. Using a mixed-methods design, data were collected from 100 HODs through two standardised instruments — the Big Five Personality Test and John C. Maxwell's Leadership Level Questionnaire — supplemented by 25 in-depth semi-structured interviews. The Big Five test categorised participants across five personality traits: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience. Maxwell's questionnaire determined leadership levels ranging from Position (Level 1) to Pinnacle (Level 5). Quantitative findings revealed that the majority of HODs (84%) operate at Level 3 (Production), with Extraversion and Conscientiousness emerging as significant positive predictors across multiple leadership levels, while Neuroticism consistently showed a significant negative correlation with all five levels. Regression analysis confirmed personality traits collectively account for between 13% and 27% of variance in leadership level. A discrepancy was also identified between leaders' self-assessed leadership levels and those attributed by their subordinates, highlighting the value of multi-perspective evaluation. The study concludes that personality type significantly influences leadership level, and recommends targeted personality-based leadership development interventions within Pakistani higher education institutions.

Keywords: Personality Type, Leadership Level, Big Five Personality Traits, Heads of Departments, Higher Education, Neuroticism

1. Introduction

Leadership remains one of the most extensively studied yet persistently contested concepts in organisational and educational research. At its core, leadership is understood as the capacity to bring individuals together within an organisation to pursue collective goals through shared vision and coordinated effort (Bass & Avolio, 1990). In an educational context, this means that academic leaders and their subordinates operate through a unified strategy aligned with the institution's broader mission. However, the complexity of leadership extends well beyond its functional definition. Leadership encompasses psychological, social, and moral dimensions; it is as much about how one lives and models behaviour as it is about directing the work of others. As Kellerman (2004) cautions, leaders who detach themselves from the

realities of human problems risk undermining the effectiveness of their leadership. Similarly, Gemmill and Oakley (1992) warn against excessive institutional dependence upon individual leaders, describing leadership as a powerful and sometimes deceptive social myth.

Leadership has also been increasingly recognised as linked to performance and productivity. Effective leaders are those who generate measurable outcomes and inspire others to exceed their own limitations (Kotter, 1996). Yet, performance-driven leadership can also produce unintended consequences, including heightened interpersonal tension and employee burnout when task achievement is prioritised over relational wellbeing (Browne, 2002). Grint (2004), drawing on Gallie (1955), describes leadership as a highly contested form of power — one that resists singular definition and carries profound implications for how authority is exercised and legitimised within institutions.

Within the broader leadership literature, personality has emerged as a central explanatory variable. Personality traits are considered among the most reliable predictors of leadership emergence and effectiveness (Hogan, Curphy & Hogan, 1994). Research grounded in the Big Five model — comprising Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience (Goldberg, 1990) — has demonstrated that different trait configurations predict differential leadership outcomes. Kirkpatrick and Locke (1991) identified conscientiousness as particularly instrumental in effective leadership, noting that more conscientious individuals are better suited to collaborative ventures essential to organisational success. Extraverted individuals, with their characteristic sociability and assertiveness, have been associated with the emergence of social leadership (Costa et al., 1988; Watson & Clark, 1997). Conversely, neurotic traits — characterised by emotional instability, insecurity, and susceptibility to stress — have been consistently linked to diminished leadership effectiveness (Mount et al., 1998; Bass, 1990).

The role of openness to experience in leadership is more nuanced. While McCrae (1987) associates openness with unconventional thinking, and Feist (1998) links it to creative personality profiles, its direct predictive relationship with leadership remains contested. Agreeableness — reflecting cooperativeness, empathy, and sensitivity — has been connected to relational leadership through its association with trust-building and effective people management (Zaccaro et al., 1991; Hogan et al., 1999). Digman (1990) further found that highly agreeable individuals adapt more readily to organisational change, a quality of considerable relevance in the rapidly evolving higher education sector.

Organisational fit theories have also shaped scholarly understanding of leadership personality. Hollenbeck's (2000) person-organisation fit model proposes that effective organisations select leaders whose personality profiles align with institutional values and culture. Sorcher (2002) extends this argument by recommending that leadership selection processes incorporate soft criteria including personality, cultural background, and personal integrity. Seibert (1999) additionally demonstrates that proactive personality traits are positively associated with career advancement and job satisfaction, suggesting that personality development has long-term professional implications.

Despite the breadth of global leadership research, the Pakistani higher education context remains comparatively underexplored. Existing studies have tended to focus on Western institutional settings, leaving a significant gap in culturally situated knowledge about how personality types shape academic leadership in South Asian contexts. Furthermore, most prior research has examined leadership broadly rather than at the level of Heads of Departments (HODs), who occupy a uniquely positioned role at the interface of academic governance and day-to-day faculty management. The present study seeks to address these gaps by investigating the specific relationship between Big Five personality traits and Maxwell's five-level leadership framework within the HOD population across Lahore's public

and private universities.

The aim of the current study is to evaluate the effect of personality type on the leadership level of Heads of Departments at university level in Lahore, Pakistan, and to determine which personality traits are the most significant predictors of higher leadership functioning as measured by John C. Maxwell's Leadership Level Questionnaire.

2. Research Question

The study is guided by the following research questions:

1. What is the effect of personality type on the leadership level of Heads of Departments at university level?
2. Which Big Five personality traits are significant predictors of higher leadership levels among Heads of Departments?

3. Literature Review

3.1 Personality and Leadership

The relationship between personality and leadership has been the subject of extensive empirical inquiry. Personality conflicts within organisations have been identified as a major source of disruption, and personality is widely regarded as the most influential factor in corporate leadership roles (Rookie, 2017). Downing (1997) argues that effective conflict resolution — shaped largely by personality — is essential for organisational growth, particularly within complex institutional cultures. Hogan et al. (1994) established that specific personality configurations are reliably associated with leadership effectiveness, though they caution that no single trait operates uniformly across all leadership contexts.

The Social Identity Theory (Tajfel & Turner, 1986) provides a useful framework for understanding how leader-follower personality alignment shapes organisational outcomes. Leaders who successfully align their personal goals with the aspirations of their followers foster intrinsic motivation and increase productivity. Schyns et al. (2007) emphasise that misalignment between leader and follower expectations constitutes a major obstacle to development. Porter, Hollenbeck et al. (2003) further demonstrate that leaders high in precision and emotional sensitivity are more effective in guiding and supporting their teams.

Research has consistently identified Conscientiousness as one of the strongest leadership predictors. Barrick (1998), in a study involving 52 teams across 51 organisations, found that teams demonstrating higher levels of conscientiousness, agreeableness, and emotional stability were consistently rated as higher-performing by supervisors. Kirkpatrick and Locke (1991) similarly concluded that conscientious leaders are more vigilant and detail-oriented than their non-conscientious counterparts. Openness to experience has been linked to creative leadership (McCrae, 1987; Feist, 1998; Sosik, Kahai et al., 1998), with individuals scoring high in this trait more likely to generate innovative solutions and embrace novel organisational challenges. Agreeableness has shown a positive though sometimes ambiguous relationship with leadership effectiveness. While Bass (1990) notes that its connection to leadership is not always direct, Zaccaro et al. (1991) and Hogan et al. (1999) identify empathy and cooperativeness as foundational ingredients of effective team leadership.

Extraversion, characterised by sociability, assertiveness, and energy, has historically been one of the most studied predictors of leadership emergence. Early studies conducted between 1904 and 1947 produced mixed findings, with some showing positive relationships, others negative, and some no relationship at all (Bass, 1990). However, more recent research has consistently associated extraversion with social leadership, particularly in settings that require frequent interpersonal engagement (Costa et al., 1988; Hogan et al., 1994). Neuroticism, by contrast, has emerged as a negative predictor of leadership at virtually all

levels of analysis. Neurotic leaders tend to be less self-efficacious, more resistant to change, and more prone to emotional dysregulation (Mount et al., 1998; Bass, 1990). Self-confidence, which is negatively correlated with neuroticism, has been identified as a core leadership trait (Bass, 1990, p.69).

3.2 Leadership Models

John C. Maxwell's five-level leadership model offers a developmentally sequenced framework for evaluating leadership maturity. The five levels — Position, Permission, Production, People Development, and Pinnacle — represent an ascending hierarchy of leadership sophistication, each building upon the preceding level. At Level 1 (Position), leaders rely on formal authority to elicit compliance. At Level 2 (Permission), they shift toward relational influence, cultivating trust and mutual respect. Level 3 (Production) leaders are characterised by a strong results orientation, setting high performance standards that inspire others to follow. At Level 4 (People Development), leaders invest in the growth and capacity of their subordinates, creating a legacy of future leaders. Level 5 (Pinnacle) represents the apex of leadership development, where leaders become institutionally indispensable symbols of vision, integrity, and selfless service (Maxwell, as cited in the study).

The Deloitte Leadership Capability Model (2020) identifies developable leadership characteristics including strategic direction-setting, sound judgment, collaborative capacity, and talent cultivation. The KIPP Leadership Competency Model (2008) similarly emphasises relational competence, results orientation, and long-term relationship-building as the three core components of effective leadership performance. Both models reinforce the view that leadership is not a fixed trait but a developable capacity shaped, in significant part, by underlying personality characteristics.

Hollenbeck's (2000) integrated person-organisation fit theory further supports this perspective, arguing that organisational culture is fundamentally shaped by the personality profiles of its people, and that effective organisations systematically select and develop leaders whose personalities align with their institutional values. Kotter (1996) adds that in an era of constant change, the capacity to lead transformationally — a quality linked to openness, extraversion, and emotional stability — has become a critical organisational asset.

4. Methodology

4.1 Research Design

This study adopted a mixed-methods design, combining quantitative survey data with qualitative interview data to provide a comprehensive account of the relationship between personality type and leadership level. The quantitative component employed an ex post facto design, as the personality traits and leadership levels under investigation were pre-existing characteristics of the participants rather than experimentally manipulated variables.

4.2 Population and Sample

The target population comprised Heads of Departments from public and private universities in Lahore, Pakistan. A purposive sample of 100 HODs was drawn from ten universities — five public and five private — with ten HODs selected from each institution. Sampling sought to achieve representation across gender and experience levels.

4.3 Instruments

Three research instruments were employed. First, the Big Five Personality Test (Goldberg, 1990) was used to classify participants across five personality traits: Extraversion,

Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience. The test comprises 50 items (10 per trait), with scores ranging from 0 to 40. Second, John C. Maxwell's Leadership Level Questionnaire was administered to determine participants' leadership levels. The questionnaire comprises four parts: Part 1 elicits leaders' self-assessment of their leadership level; Part 2 records leaders' perceptions of their subordinates' levels; Part 3 captures subordinates' perceptions of the leader; and Part 4 provides a composite leadership level calculation. A minimum of eight affirmative responses per level is required to progress to the next level. Third, a researcher-designed semi-structured interview protocol comprising ten open-ended questions was used to generate qualitative leadership data from 25 HODs.

4.4 Procedure

Data collection was conducted individually with each HOD. Questionnaires were distributed in person and collected after sufficient completion time was allowed. Interviews were arranged by appointment and conducted face-to-face. The full data collection process spanned 24 weeks. Quantitative data were analysed using Pearson correlation and multiple linear regression analyses via SPSS. Qualitative interview data were analysed thematically and cross-referenced against Maxwell's five-level framework.

5. Findings

5.1 Leadership Level Distribution

Analysis of Maxwell's Leadership Level Questionnaire revealed that the overwhelming majority of HODs — 84 out of 100 — scored at Level 3 (Production). Fourteen HODs were identified at Level 2 (Permission), and two at Level 1 (Position). No HOD reached Level 4 (People Development) or Level 5 (Pinnacle) on the self-report and subordinate-perception instruments. However, interview data produced a markedly different picture: 4 leaders were assessed at Level 2, 4 at Level 3, 10 at Level 4, and 7 at Level 5, with none at Level 1. This discrepancy signals a systematic gap between how leaders perceive their own leadership level and how they are assessed through deeper qualitative inquiry.

Table 1: Comparison of Maxwell Questionnaire with Interview Data

Level	Maxwell Questionnaire (N=100)	Interview Data (N=25)
Level 1	2	N/A
Level 2	14	4
Level 3	84	4
Level 4	N/A	10
Level 5	N/A	7
Total	100	25

5.2 Big Five Personality Trait Distribution

Among the 100 HODs, Openness to Experience was the most dominant trait, identified in 47 participants. Agreeableness was the primary trait in 30 participants, followed by Extraversion (24), Conscientiousness (8), and Neuroticism (5).

5.3 Correlation Analysis: Leadership Levels and Personality Traits

Pearson correlation analysis revealed the following relationships between Big Five

personality traits and the five levels of Maxwell's leadership framework:

Extraversion showed no statistically significant correlation with any of the five leadership levels individually, though it emerged as a significant predictor in regression analyses.

Agreeableness showed a significant positive correlation with Level 1 ($r = .282, p = .004$) and Level 3 ($r = .254, p = .011$), but no significant correlation with Levels 2, 4, or 5.

Conscientiousness showed no significant correlation with any leadership level in bivariate analysis.

Neuroticism showed a significant negative correlation across all five leadership levels: Level 1 ($r = -.269, p = .007$), Level 2 ($r = -.354, p = .000$), Level 3 ($r = -.229, p = .022$), Level 4 ($r = -.210, p = .036$), and Level 5 ($r = -.426, p = .000$).

Openness showed a negative (though mostly non-significant) correlation with all five levels, with a statistically significant negative correlation at Level 5 ($r = -.294, p = .003$).

5.4 Self-Perception and Subordinate-Perception Correlations

Across all five levels, a significant negative correlation was found between leaders' self-assessed leadership level and subordinates' assessments of those same leaders, indicating that leaders consistently over-rated their own leadership level relative to how their subordinates perceived them. Conversely, a significant positive correlation was found between leaders' perceptions of their subordinates' level and subordinates' perceptions of the leader's level, suggesting alignment in how both parties evaluate the other's performance.

5.5 Regression Analysis

Multiple linear regression was conducted to assess the predictive power of Big Five traits across each leadership level. Key findings are summarised below:

Level 1: The model accounted for 26.8% of variance ($R^2 = .268, F(5,94) = 6.875, p < .001$). Extraversion ($\beta = .234, p = .020$) and Conscientiousness ($\beta = .279, p = .031$) were significant positive predictors. Neuroticism ($\beta = -.393, p = .001$) was a significant negative predictor.

Level 2: The model accounted for 17.1% of variance ($R^2 = .171, F(5,94) = 3.887, p = .003$). Neuroticism ($\beta = -.455, p = .000$) was the sole significant predictor.

Level 3: The model accounted for 19.5% of variance ($R^2 = .195, F(5,94) = 4.550, p = .001$). Extraversion ($\beta = .235, p = .026$) was a significant positive predictor, and Neuroticism ($\beta = -.386, p = .002$) was a significant negative predictor.

Level 4: The model accounted for 13.4% of variance ($R^2 = .134, F(5,94) = 2.915, p = .017$). Extraversion ($\beta = .254, p = .020$) was a significant positive predictor and Neuroticism ($\beta = -.342, p = .009$) a significant negative predictor.

Level 5: The model accounted for 26.2% of variance ($R^2 = .262, F(5,94) = 6.669, p < .001$). Neuroticism ($\beta = -.460, p = .000$) was the strongest significant predictor; Extraversion approached significance ($p = .065$).

6. Discussion and Conclusion

The findings of this study provide robust empirical evidence that personality type significantly shapes leadership level among Heads of Departments in Pakistani universities. The predominance of Level 3 (Production) leaders across the sample — 84 out of 100 — reflects the prevailing institutional demand for task-focused, results-oriented academic administrators. As Maxwell's framework explains, Level 3 leaders are those who inspire through action and set performance standards that generate organisational momentum. This pattern aligns with Kotter's (1996) observation that contemporary organisations increasingly

reward leaders who demonstrate measurable productivity.

The consistent emergence of Neuroticism as a significant negative predictor across all five leadership levels is one of the study's most striking findings. This result corroborates earlier work by Mount et al. (1998) and Bass (1990), who identified emotional instability and insecurity as fundamental impediments to effective leadership. The data suggest that regardless of a leader's position on the Maxwell hierarchy, neurotic personality characteristics create a reliable drag on leadership functioning, likely due to their association with poor stress management, reduced self-efficacy, and reactive decision-making.

Extraversion's role as a significant positive predictor of leadership at Levels 1, 3, 4, and 5 aligns with established theory linking sociability, assertiveness, and interpersonal energy to leadership emergence (Costa et al., 1988; Hogan et al., 1994). The findings suggest that extraverted HODs are better positioned to build coalitions, communicate institutional vision, and sustain subordinate engagement — qualities increasingly essential as leaders advance beyond positional authority toward relational and developmental forms of leadership.

The significant negative correlation between Openness and Level 5 leadership is a counterintuitive finding that warrants further investigation. While openness has been associated with creative and innovative leadership in the broader literature (McCrae, 1987; Feist, 1998), the present data suggest that, within Pakistani university contexts, very high levels of openness may not translate readily into the sustained, legacybuilding behaviours that characterise Pinnacle leadership. It is possible that the day-dreaming and idealistic tendencies associated with high openness, as noted within the sample itself, may impede the disciplined long-term focus required at Level 5.

The discrepancy between leaders' self-assessed leadership levels and those attributed through interview-based assessment is a particularly notable finding. While Maxwell's questionnaire placed no HOD above Level 3, qualitative interviews identified 17 individuals operating at Levels 4 and 5. This suggests that self-report instruments alone may systematically underestimate leadership capability by anchoring leaders within prevailing institutional cultures rather than capturing the full range of their developmental leadership behaviours. The inverse — that subordinates rated their leaders lower than leaders rated themselves — reinforces prior research on leader overconfidence and the value of 360-degree feedback frameworks (Atwater & Waldman, 1998).

In conclusion, this study confirms that personality type exerts a significant influence on the leadership level of academic department heads in Pakistani universities. Neuroticism is a universal negative predictor of leadership effectiveness across all levels, while Extraversion and Conscientiousness are positive predictors, particularly at foundational and intermediate leadership levels. The majority of HODs remain at the Production level, suggesting that institutional structures and incentive systems may inadvertently discourage advancement toward the relational and developmental leadership behaviours associated with Levels 4 and 5. These findings carry direct implications for leadership selection, personality-informed professional development, and the design of university leadership training programmes in Pakistan and comparable higher education contexts.

6.1 Recommendations

Based on the findings, the following recommendations are proposed:

3. Leadership level is developable; institutions should invest in periodic, structured leadership training designed to move HODs beyond the Production level.
4. Personality assessments should be incorporated into leadership selection processes to ensure temperamental alignment with institutional culture and leadership demands.

5. Leadership development curricula should explicitly address neuroticism, offering HODs evidence-based strategies for emotional regulation, resilience, and adaptive stress management.
6. Extraversion should be recognised and developed as a teachable leadership competency, particularly for HODs in naturally introverted academic disciplines.
7. Multi-perspective (360-degree) evaluation tools should supplement self-report leadership assessments to close the gap between self-perception and subordinate-attributed leadership level.

References

- Ahmad, I. (2010). The big five personality inventory: Performance of students and community in Pakistan. *Journal of Behavioural Sciences*, 20(2), 63–79.
- Atwater, L., & Waldman, D. (1998). 360 degree feedback and leadership development. *Leadership Quarterly*, 9(4), 423–427.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the multifactor leadership questionnaire. *Journal of Occupational and Organizational Psychology*, 72, 441–462.
- Avolio, B. J., Waldman, D. A., & Einstein, W. E. (1988). Transformational leadership in a management game simulation: Impacting the bottom line. *Group and Organization Studies*, 13, 59–80.
- Avery, D. R., Tonidandel, S., Griffith, K. H., & Quiñones, M. A. (2003). The impact of multiple measures of leader experience on leader effectiveness. *Journal of Business Research*, 56, 673–700.
- Barrick, M. R. (1998). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment*, 9(1–2), 9–30.
- Bass, B. M., & Avolio, B. J. (1990). Developing transformational leadership: 1992 and beyond. *Journal of European Industrial Training*, 14, 21–27.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Lawrence Erlbaum Associates.
- Browne, M. N. (2002). Personality and leadership: Understanding the connection. *Journal of Organisational Behaviour*, 14(2), 35–52.
- Chan, K. Y., & Drasgow, F. (2001). Toward a theory of individual differences and leadership: Understanding the motivation to lead. *Journal of Applied Psychology*, 86(3), 481–498.
- Chemers, M. (1997). *An integrated theory of leadership*. Lawrence Erlbaum Associates.
- Chemers, M. (2000). Leadership research and theory: A functional integration. *Group Dynamics: Theory, Research, and Practice*, 4(1), 27–43.
- Connelly, M. S., et al. (2000). Exploring the relationship of leadership skills and knowledge to leader performance. *Leadership Quarterly*, 11(1), 65–86.
- Costa, P. T., Jr., McCrae, R. R., & Dye, D. A. (1988). Facet scales for agreeableness and conscientiousness: A revision of the NEO personality inventory. *Personality and Individual Differences*, 12(9), 887–898.
- Deloitte. (2020). *Deloitte leadership capability model*. Deloitte Insights.
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*, 41, 417–440.
- Dole, C., & Schroeder, R. G. (2001). The impact of various factors on the personality, job satisfaction and turnover intentions of professional accountants. *Managerial Auditing Journal*, 16(4), 234–245.

- Downing, S. (1997). Organisational conflict and leadership: An integrative approach. *Leadership Quarterly*, 8(3), 45–63.
- Effron, M., Greenslade, S., & Salob, M. (2005). Growing great leaders: Does it really matter? *Human Resource Planning*, 28, 18–23.
- Eigel, K. M., & Kuhnert, K. W. (2005). Authentic development: Leadership development level and executive effectiveness. *Monographs in Leadership and Management*, 3, 357–385.
- Feist, G. J. (1998). A meta-analysis of personality in scientific and artistic creativity. *Personality and Social Psychology Review*, 2(4), 290–309.
- Gallie, W. B. (1955). Essentially contested concepts. *Proceedings of the Aristotelian Society*, 56, 167–198.
- Gemmill, G., & Oakley, J. (1992). Leadership: An alienating social myth? *Human Relations*, 45(2), 113–129.
- Goldberg, L. R. (1990). An alternative 'description of personality': The big-five factor structure. *Journal of Personality and Social Psychology*, 59(6), 1216–1229.
- Grint, K. (2004). What is leadership: Person, result, position or process — or all four? *Sage Leadership Journal*, 1(1), 1–19.
- Hofstede, G. (1997). *Culture and organizations: Software of the mind*. McGraw-Hill.
- Hogan, R. T., Curphy, G. J., & Hogan, J. (1994). What we know about leadership: Effectiveness and personality. *American Psychologist*, 49(6), 493–504.
- Hogan, R., & Hogan, J. (1999). Assessing leadership: A view from the dark side. *International Journal of Selection and Assessment*, 9(1–2), 40–51.
- Hollenbeck, G. P. (2000). A seismic shift in leadership development. *Human Resource Management*, 38(3), 235–240.
- Kellerman, B. (2004). *Bad leadership: What it is, how it happens, why it matters*. Harvard Business School Press.
- Keller, T. (1999). Images of the familiar: Individual differences and implicit leadership theories. *Leadership Quarterly*, 10(4), 589–607.
- KIPP Foundation. (2008). KIPP leadership competency model. KIPP Foundation.
- Kirkpatrick, S. A., & Locke, E. A. (1991). Leadership: Do traits matter? *Academy of Management Executive*, 5(2), 48–60.
- Kotter, J. P. (1996). *Leading change*. Harvard Business School Press.
- McCrae, R. R. (1987). Creativity, divergent thinking, and openness to experience. *Journal of Personality and Social Psychology*, 52(6), 1258–1265.
- McCrae, R. R., & Costa, P. T., Jr. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52(1), 81–90.
- McCrae, R. R., Costa, P. T., Jr., et al. (1997). Personality trait structure as a human universal. *American Psychologist*, 52(5), 509–516.
- Mount, M. K., Barrick, M. R., & Stewart, G. L. (1998). Five-factor model of personality and performance in jobs involving interpersonal interactions. *Human Performance*, 11(2–3), 145–165.
- Porter, L. W., Hollenbeck, J. R., et al. (2003). *Organizational behavior* (5th ed.). McGraw-Hill.
- Rookie, I. (2017). Personality and leadership in the corporate sector. *Journal of Applied Management Studies*, 6(1), 21–34.
- Schyns, B., Felfe, J., & Blank, H. (2007). Is charisma hyper-romanticism? Empirical evidence from new data and a meta-analysis. *Applied Psychology: An International Review*, 56(4), 505–527.

- Seibert, S. E. (1999). Proactive personality and career success. *Journal of Applied Psychology*, 84(3), 416–427.
- Sosik, J. J., Kahai, S. S., & Avolio, B. J. (1998). Transformational leadership and dimensions of creativity: Motivating idea generation in computer-mediated groups. *Creativity Research Journal*, 11(2), 111–121.
- Sorcher, M. (2002). *Predicting executive success: What it takes to make it into senior management*. Wiley.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Nelson-Hall.
- Tagger, S., Hackett, R., & Saha, S. (1999). Leadership emergence in autonomous work teams: Antecedents and outcomes. *Personnel Psychology*, 52(4), 899–926.
- Watson, D., & Clark, L. A. (1997). Extraversion and its positive emotional core. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology* (pp. 767–793). Academic Press.
- Yukl, G. (1998). *Leadership in organizations* (4th ed.). Prentice Hall.
- Zaccaro, S. J., Foti, R. J., & Kenny, D. A. (1991). Self-monitoring and trait-based variance in leadership: An investigation of leader flexibility across multiple group situations. *Journal of Applied Psychology*, 76(2), 308–315.