



Development and Validation of the Perceived Leaders' Integrity Assessment Scale

Nazish Shabir ¹, Amina Muazzam², Sjaan Koppel³, Sana Shabir⁴

¹ Ph.D. Scholar, Accident Research Centre, Monash University, Australia/Lahore College for Women University, Lahore, Punjab, Pakistan. Email: nazishshabbir1@gmail.com

² Tenured Professor, Lahore College for Women University, Lahore, Punjab, Pakistan.
Email: amina.muazzam@lcwu.edu.pk

³ Associate Professor, Accident Research Centre, Monash University, Australia.

⁴ M.Phil. Scholar, The Islamia University of Bahawalpur, Punjab, Pakistan. Email: sanaShabirParacha@gmail.com

ARTICLE INFO

ABSTRACT

Article History:

Received: December 28, 2023
Revised: March 28, 2024
Accepted: March 29, 2024
Available Online: March 30, 2024

Keywords:

Perceived Leaders' Integrity
Leader's Integrity
Leadership
Ethical Leadership
Moral Values
Ethical Values

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

The impact of leaders' integrity on organisations and employees' effectiveness has not been thoroughly studied, possibly due to the absence of a comprehensive measurement scale in this domain. Recognizing this gap, the current study aimed to develop the Perceived Leaders' Integrity Assessment Scale (PLIAS). Specifically, the scale assesses employees' perception of their leader's integrity, where the leader is defined as the employee's current employer (i.e., immediate supervisor/manager). For this purpose, data were collected from (N=1,430) employees in Pakistan. In Phase I, phenomenology (i.e., integrity, honesty, ethics, and supportive behaviour) was studied, a pool of items was generated, and 40 items were screened. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were applied in Phase II, and five factors for the PLIAS, including ethical, immoral, unethical, supportive, and positive attitudes, were identified. In Phase III, psychometric validation. These suggest that the PLIAS is a reliable tool for assessing the perceived integrity of leaders by employees of their current employer (i.e., immediate supervisor/manager). Overall, developing and validating the PLIAS dramatically enhances the understanding of leadership characteristics in workplace settings. By providing a standardized instrument for assessing leaders' integrity, the PLIAS enables organisations to gain insights into the impact of leadership integrity on employee effectiveness and organisational outcomes.

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Corresponding Author's Email: nazishshabbir1@gmail.com

1. Introduction

Integrity has been identified as a vital quality for influential leaders (Heiss, 2023) however, corporate researchers have not yet identified the nature of a leader's integrity. In its early stages, integrity research aimed to explain leadership integrity and to use such explanations to develop theory-based measures. Drawing on the Authentic Leadership Development (ALD) theory, authentic leaders encourage the growth of their employee's authenticity. Authenticity benefits employees' well-being and achieves sustainable and authentic performance (Ribeiro, Duarte, Filipe, & David, 2022). According to Clayton and George, in 2022, we want leaders to demonstrate purpose, principles, and ethics. These leaders develop organisations that last, motivate employees to provide exceptional customer service, and generate lasting shareholder value. Seifu and Jalata (2022) employed the concepts of reciprocity and value congruence to elucidate how authentic leaders foster constructive social interactions with their subordinates. Furthermore, Ghufuran Ali Khan, Anwar Khan, Iftikhar Ali, Salem, Rashid, and Zahur (2022) observed that the social exchange theory, as proposed by Blau (1964), explicitly argues that interactions between leaders and employees

will be marked by elevated levels of respect, effective communication, and trust when leaders demonstrate impartial handling of relevant information, personal honesty, and a genuine focus on building relationships. Reciprocity, as proposed by the ALD theory, promotes the well-being and authenticity of employees. In a study conducted by Tan, Yap, Choong, Choe, Rungruang, and Li (2019), it was found that the impact of ethical leadership is contingent upon employees' job performance and their perception of behaviours such as integrity, honesty, and ethics.

Charismatic/transformational leadership effectiveness has recently recognised ethics and dependability as crucial factors (Kassim, 2023). A study conducted by Ream (2022) highlighted the significance of integrity in charismatic/transformational leadership. The study involved diverse participants, including naval officers, college students, and professionals. The participants consistently associated the qualities of "ethical," "principled," and "wholesome" more frequently with charismatic leaders compared to non-charismatic leaders. Research conducted by Wang (2022) has established a correlation between integrity in leaders and several favourable employee outcomes. These outcomes include trust and respect for the leader, engagement in organisational citizenship behaviours, high performance, job satisfaction, strong organisational commitment, and lower turnover intentions. Furthermore, Shabir and Muazzam (2024) determined that employees must respond in kind when they observe their employer demonstrating fairness and concern for their empowerment. This, in turn, enhances their degree of engagement within the firm. Ahmad, Ullah, AlDhaen, Han, and Scholz (2022), argued that moral leaders cultivate a sense of fairness and trust among their colleagues, creating a conducive atmosphere for ethical conduct. To be more precise, these leadership qualities enhance the psychological empowerment of employees. Employees are encouraged to improve their work by demonstrating heightened job commitment and a proactive attitude toward their tasks (Patanjali & Bhatta, 2022). Bialek and Hagen (2022) studied how vital leadership development is for many companies and how it helps them succeed. They looked at employees who might become leaders in the future. These employees judged their current leaders in three main areas: how good they are at things (like helping others, solving problems, planning well, making teams work, and talking effectively), what values they have (like being responsible, disciplined, and keeping things balanced), and what kind of person they are (like being real, working well with others, being honest, and showing respect). Another study by Park, Kim, and Song (2015) looked at how employees see their leaders and how that affects how the employees think and act. They found that when employees believe their leaders are fair, honest, and have good morals, they make the employees feel positive and act positively. According to Shabir, Muazzam, Koppel, and Shabir, a leader with strong ethics enhanced organisational transparency (OT), psychological empowerment (PE), and employee engagement (EE). PE fully mediate the relationship between PLI, OT, and EE, emphasizing their significance in creating a positive work environment. The results suggested that providing specialized management training that focuses on integrity helps foster a motivated and committed workforce.

In conclusion, while previous research suggests that employees' perceptions of their leaders' integrity play a crucial role in their performance, our current empirical understanding does not permit us to say much more. Specifically, we do not know how an employee's perceptions evolve or which of the leader's behaviours most influence impression development. This lack of empirical attention to the precise function of integrity in leadership is likely attributable to the difficulty in measuring leaders' integrity in organisational contexts. Furthermore, although Boeding 2022, evaluated all-encompassing perceptions of a leader's integrity, their study did not pinpoint the leader behaviours that influenced employees' perceptions of that integrity or the specific level(s) of management assessed. Several investigations have revealed unethical behaviour in numerous companies over the past decades (Morched, Ezzeddine, & Jarboui, 2023). Professionals and academic researchers continue to be keenly interested in studying unethical behaviour in organisations, possibly because news reports reveal unethical behaviour such as report falsification, harassment of coworkers, and deceptive advertising (Kaptein, 2022). For several years, experts have argued why unethical behaviour is prevalent in some firms but not others (Amoah & Steyn, 2023). Most theories and empirical studies ascribe unethical behaviour to situational variables linked with the organisation, individual traits, or the combination of these aspects (Santalla-Banderali & Malavé, 2022).

2. Existing Scale of PLIS

In the realm of development and validation of PLIAS, it is noteworthy to acknowledge the presence of an established scale known as the Perceived Leader's Integrity Scale (PLIS) by Craig and Gustafson (1998), which focuses on assessing employee perceptions of leader integrity. This scale, often referred to as PLIS, has been widely utilized. As we delve into our study, we aim to build upon and extend the existing understanding by introducing a novel perspective on the PLIS concept. Although Craig and Gustafson (1998) Perceived Leader's Integrity Scale (PLIS) has been a valuable tool for evaluating employee views of the integrity of their leaders, the proposed PLIAS aims to expand upon and enhance the PLIS in some essential ways:

2.1. Contemporary Contextualization

How we see ethics and leadership has evolved in today's HR and organisational world. PLIAS considers these modifications. It functions well with the way things are now and is made to suit today's workplace. This guarantees the scale makes logic and clarifies the integrity of leadership in modern organisations. The PLIAS speaks about customising and adjusting the scale to better suit the circumstances, existing surroundings, and subtle cultural differences. It entails considering the particular features, difficulties and influences leaders and their followers encounter in the current era. The PLIAS attempts to ensure that the scale is still applicable, precise, and valuable in expressing views of the integrity of leaders in the present organisational and social setting.

2.2. Expanded Dimensionality

Our goal with PLIAS is to obtain a more profound and more complex knowledge of how followers and employees view the integrity of their leaders. A more extensive variety of dimensions makes the scale more thorough and representative of how leaders can show integrity. These might not have been in Craig and Gustafson (1998) PLIS. We come to understand as we study leadership that fresh factors are essential for morally and honestly leading. These additional features are therefore included to improve and modernise the scale.

2.3. Psychometric Rigour and Validation

To guarantee the PLIAS's validity and dependability, extensive psychometric testing and validation processes will probably be needed during its development. A wide range of individuals, sophisticated statistical methods, and validation to improve the resilience of the scale may all be part of this procedure.

3. Methodology

The current study aimed to (a) create a PLIAS and (b) evaluate its psychometric characteristics. Three phases comprised this study.

Phase I: Determining the Perceived Leader Integrity Scale Phenomenology

The initial pool of items for PLIAS was generated by following these steps.

Step I: Item Generation

In the first stage, thorough literature research and unstructured interviews were used to identify PLIAS's phenomenology and create the initial pool of items.

3.1. Sample

Interviews were conducted with three leaders/employers (i.e., immediate supervisor/manager) and six employees from public and private sector organisations to explore how integrity is essential for a leader and its implementation in the work setting.

3.2. Procedure

The interviews had a maximum duration of thirty minutes and were divided into two stages. Participants were asked to give verbal consent after being informed of the study's concept and goal in the first phase. *In the second step*, participants were offered a list of open-ended questions. They were instructed to provide any further information and express their opinions on the perception of a leader's integrity. The following items were identified through the interviews: 'ethical values', 'moral values', 'integrity', and 'honesty'.

Step II: Content Validity Through Expert Rating

The items identified in Step I were reviewed to measure the respondent's perception of their immediate supervisor/manager's behaviour; after a thorough review, a list of items was identified for empirical validation.

3.3. Sample

Experts, including organisational psychologists (n=2), professors of psychology (n=2) and human resource specialists (n=2), were selected to rate the relevance of each item of the PLIAS.

3.4. Procedure

The list of identified items was presented to the experts. Each expert was asked to rate the relevance of each item to the PLIAS on a 4-point Likert scale (where 1=not relevant, 2=to some extent relevant, 3=relevant, and 4=highly relevant). After obtaining the ratings from all experts, the Content Validity Index (CVI) was calculated (see Table 1), and items were retained if they had a value ≥ 0.83 (Lynn, 1986). In Table 1, the Item-CVI of PLIAS calculation results showed that 38 of the original 40 items were kept. The Scale Content Validity Index (S-CVI) was calculated using the formula: $S-CVI = \text{Total Item CVIs} / \text{Total Item Count}$; $S-CVI = 36.5/40$ $S-CVI = 0.91$.

Step III: Pilot Study

A pilot study was carried out to determine the potential of the PLIAS and finalise the components for the EFA.

3.5. Sample

A non-probability purposive sample technique was used to choose participants. A sample of N=30 employees aged between 25-60 years (M=27.77, SD=5.39) working under the supervision of a civil services officer was selected for the pilot study.

3.6. Procedure

Items identified through the S-CVI were provided to participants. They were asked to rate each item according to their perception of their leader's behaviour on a 4-point Likert scale (1=Always, 2=Often, 3=Sometimes, 4=Never). The criteria for item retention was endorsement $\geq 85\%$. All 38 items were included in the final version of PLIAS because none had been eliminated based on these standards.

4. Data Analysis

Phase II: Construct Validity Establishment Using Factor Analysis

Factor analysis is a widely used statistical technique for assessing an instrument's construct validity (Cronbach & Meehl, 1955). The concept validity and factor structure of the PLIAS were assessed using EFA. Before factor extraction was performed, numerous criteria were considered. First, retaining factors with eigenvalues greater than 1 is one of the most frequent criteria for addressing the number of factors (Kaiser, 1960). To avoid cross-loadings, items with factor loadings < 0.50 for multiple factors were also removed (Hair, Anderson, Tate and Black, 1998). Similar to how factor loadings are advantageous for factor extraction, scree plots and similarities were also considered. Field (2005) found that corrected item-to-total correlation values below 0.30 are typically undesirable in this scenario. The Cronbach's alpha, which assessed the dependability of scales, should be at least 0.70. EFA was used to connect group variables and shrink the dataset to a more manageable size. The varimax rotation method was used to make it easier for the group to interpret the factors (Field, 2005). Cross-loading items and those with low factor loading and item-total scores were eliminated using an iterative method based on the EFA mentioned above criterion until acceptable factors were achieved.

4.1. Sample

A sample of N=500 employees working under the supervision of civil services officers aged between 25-60 years (M = 30.13, SD= 4.98) was selected from different government departments in Lahore, Pakistan. Information regarding demographic variables was also collected.

4.2. Procedure

Participants provided consent, and confidentiality was ensured. A 38-item PLIAS was presented to the participants.

Step I: Exploratory Factor Analysis (EFA)

After determining the factor analysis assumptions, 38 items were subjected to EFA. The principal component analysis (PCA) yielded five factors with Eigenvalues exceeding 1 (see Table 2). All variables were clear, precisely defined, and decided upon under theoretical hypotheses. EFA was applied using PCA through the varimax rotation, and factors were extracted. By enhancing the variance of factors, Varimax rotation improves factor comprehension (Kim and Mueller, 1978). Elimination of items with an eigenvalue less than 1. Five factors accounted for significant variance; Factor 1 explained 44.59% of the variance, whereas factor 2 explained 15.22%, factor 3 explained 6.66%, factor 4 explained 4.30%, and factor 5 explained 3.57%. To assess the sufficiency of the data, the Kaiser Myer Olkin (KMO) test value was also calculated; it was .894, which indicates that the sample was adequate (see Table 3). At p .001, the Bartlett Test of Sphericity (BTS) value of 25904.533 was significant, indicating a proper data distribution (see Figure 1). Analyzing the criterion for factor loadings >0.50 in the principal component factor model. The findings of the solution based on five factors are reviewed. 14 items in the first factor had high loadings (see Table 4). Six items achieved a high loading for the second factor. The remaining eight items carried out high-factor loadings for factors 3, 4, and 5. Three items executed high factor loadings for factor 5. The remaining three of the 38 PLIAS items were excluded due to their minimal factor loading.

4.3. The Final Scale

The PLIAS comprised 35 items into five factors or subscales (Annex-I). The items were empirically derived and designed considering the culturally relevant PLIAS. A 4-point Likert scale was utilized for PLIAS. Moreover, the final factor of the structure was interpreted in light of its theoretical significance and factor loadings' magnitude. In addition, 35 items were exhaustively examined, and every effort was made to ensure that each factor was conceptually distinct, but Through SPSS, EFA was applied to the gathered data interrelated.

Factor 1- Ethical Behaviour. The first factor comprised 14 elements related to the leader's Ethical Behaviour. The item number (1-14) exhibited loading on the first factor, accounted for 44.59% of the variance, and had higher loadings than the remaining factors. This subscale's entirety is reserved-coded.

Factor 2- Immoral Behaviour. The second factor consisted of six items pertaining to the immoral conduct of the leader. The item no. (15-20) had greater loadings on the second factor, which accounted for 15.22% of the variance and had greater loadings than the other factors.

Factor 3- Unethical Conduct. The third factor included eight items associated with Unethical Conduct. Item number (21-28) had higher loadings on the third factor, which accounted for 6,66% of the variance and had higher loadings than the other factors.

Factor 4- Supportive Behaviour. The fourth factor consisted of four items pertaining to Supportive Behavior. The item number (29-32) had higher loadings on the fourth factor, which accounted for 4.30 percent of the variance and had higher loadings than the other factors. This subscale's entirety is reserved-coded.

Factor 5- Positive Attitude. The fifth factor consisted of three items pertaining to a positive attitude. The item with the highest loadings on the fifth factor, which explained 3.57 % of the variance and had higher loadings than the other factors, was item no. 33-35. This subscale's entirety is reserved-coded.

Excluded Items. 3-items (36, 37, and 38) are excluded from PLIAS due to low factor loading in EFA.

Scoring Procedure. Higher PLIAS scores indicate higher leaders' integrity. 21 items from the scale are reverse coded.

Step II: Confirmatory Factor Analysis (CFA)

EFA revealed five-factor solutions out of PLIAS's 35 items. IBM SPSS Amos version 23 was used to conduct a CFA to validate the five PLIAS factors (see Table 5) and the inter-correlation matrix of PLIAS five factors (Table 6).

4.4. Sample

A sample of N=700 participants (men: n=336; women: n=364) was identified using a purposive sampling technique for CFA. Participants were recruited from different government departments working under the supervision of civil services officers. Participants were aged between 25-60 years (M=30.06, SD=4.90). Participants were briefed about the research objectives before participation and provided consent. The Phase I PLIAS validated its factor structure and dimensionality (see Table 7).

4.5. Procedure

Using CFA, five PLIAS factors were examined. The Comparative Fit Index (CFI), Goodness of Fit Index (GFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA) were among the indices used in the current investigation to explain the outstanding model fit (Bentler, 1990). Findings of the EFA of PLIAS (with item loading greater than .50) were examined in the CFA (see Table 8). The final structure model of PLIAS confirmed 35 items (see Figure 2). The first factor comprised 14 items related to Ethical Behaviour. The second factor comprised six items pertaining to Immoral behaviour. The third factor comprised eight items related to Unethical Conduct. The fourth factor comprised 4-items related to Supportive Behaviour. The fifth factor comprised 3-items related to Positive Attitude. The CFA showed an excellent fit to the data with Chi-Square=1194.972, df=550, RMSEA=.05, TLI=.90, CFI=.93, and GFI=.95. The CFA model shows an excellent fit to data by comprising 35 items of five factors with loadings ranging from .45 to 1.07.

Phase III Establishing Psychometric Properties of PLIAS

In this stage, reliability analysis, discriminant validity, and convergent validity of PLIAS were used to establish its psychometric properties.

Step I: Reliability of PLIAS

The 35-item PLIAS's alpha reliability coefficient was .93. The high alpha coefficient value shows that PLIAS is dependable and internally consistent. The 14-item Ethical Behaviour subscale was .832, the 6-item Immoral Behaviour subscale was .676, the 8-item Unethical Conduct subscale was .767, the 4-item Supportive Behaviour subscale was .717, and the 3-item Positive Attitude subscale was .646 (see Table 9).

Step II: Convergent Validity

By comparing the PLIAS developed in the current study to the Authentic Leadership Questionnaire (ALQ) produced by Walumbwa et al. 2008, the convergent validity of the PLIAS was evaluated. Given that employees who perform well on ALQ will also perform effectively on PLIAS, these two constructs are similar in establishing convergent validity. For this purpose, a sample of N=200 employees (men=49.5%; women=50.5%) working under the supervision of civil services officer aged 25-60 years (M=29.93, SD=5.02) was selected using a non-probability purposive sampling technique, from different government departments of Lahore, Pakistan. After gathering information, the correlation between the two surveys' replies was computed (see Table 10). It was hypothesized that the ALQ 16 items and the PLIAS 35 items would positively correlate. The overall scores of the two instruments had a correlation coefficient of $r=.546$, $p.001$.

Step III: Discriminant Validity

The discriminant validity of the PLIAS was assessed by determining the relationship between the instrument developed by the PLIAS in the present research and the Nepotism scale developed by Abdalla, Magharabi, and Ragged (1998). These two constructs are opposite to those used to establish discriminant validity. A sample of N=200 employees working under the supervision of civil services officers aged 25-60 years (M=29.93, SD=5.02) was selected from different government departments of Lahore, Pakistan, using a non-probability purposive sampling technique. After gathering information, the correlation between the two questionnaires' responses was computed (see Table 11). It was hypothesized that the ten items of Nepotism would negatively be correlated with the 35 items of the PLIAS. The two instruments' combined scores had a correlation coefficient of $r=-.386$, $p.001$; Employees who scored high on Nepotism tended to score low on the PLIAS.

5. Discussion

Present research indicates that a leader's integrity impacts an employee's work performance. Consequently, there is a need to develop and validate an assessment tool to assess employees' perception of their immediate supervisor/manager's integrity. The current research study yielded a reliable measure of how a leader's integrity impacts an employee's work performance - the PLIAS. An empirically constructed set of items for this scale was given to a sample of 1,430 people. Varimax rotation was applied during the factor analysis. The varimax rotation is the simplest solution to the infinite number of rotations that predicts each factor's accuracy and precise interpretation (Kaiser, 1974). Five factors, ethical behaviour, immoral behaviour, unethical conduct, supporting behaviour, and positive attitude, were identified by factor analysis. The 35-item PLIAS's alpha internal consistency was very high, .93. Research has been conducted, including validation studies. Participants' PLIAS and ALQ scores were connected to establish convergent validity. The findings indicate a strong and favourable association. The significance of creating PLIAS is not diminished by an association with ALQ that is good. The inverse relationship between Nepotism and PLIAS scores proved discriminant validity.

6. Conclusion

Given the significant impact of a leader's integrity on employee's work performance and psychological empowerment, a scale must be created to measure employees' perception of their current employer's (i.e., immediate supervisor/manager) integrity. Prior research has demonstrated the existence of measurement tools that evaluate the various leadership styles and ethical leadership of supervisors and managers. Each of these scales possesses its unique level of validity and reliability. Nevertheless, the PLIAS is the initial scale designed to assess employees' views of the integrity of their present employer, supervisor, or manager. The conceptual foundations of the items employed in the scale were derived from empirical research and substantiated by an extensive literature assessment. The 35-item PLIAS included five further aspects: ethical behaviour, immoral behaviour, unethical conduct, supportive behaviour, and positive attitude. Given the well-established psychometric strength of the scale, it might be utilised in future studies within the fields of industrial/organizational psychology, occupational psychology, business psychology, and business research. Its purpose would be to investigate employees' impression of their immediate supervisor/manager's honesty.

6.1. Limitations and Suggestions

The main limitation of the study was population. The sample of the current research was drawn only from public offices in Pakistan (age range 25-60 years). In addition, private sector employees were not part of the sample. This scale could also be used as a comparative study among other countries' populations. It could also help to evaluate the perception of their immediate supervisor/manager's integrity and its impact on their work performance and other work-related variables. The scale only focuses on employees; therefore, it cannot be directly administered to the supervisor/manager. The scale requires future validation against the worldwide population.

6.2. Implications of the Study

The PLIAS can provide significant insights into various professions, such as industrial/organizational psychologists, occupational psychologists, business psychologists, and business researchers. This tool is highly effective for exploring employees' impressions of the integrity displayed by their immediate supervisors/managers. Organisations can effectively

increase employee job performance by utilising this scale and implementing strategic interventions that strengthen leadership integrity.

6.3. Global Significance

The scale is applicable in many cultural and contextual settings in a globalised society, where organisations frequently operate across borders. The PLIAS provides a standardised method for assessing the integrity of leaders, allowing firms to effectively evaluate individuals from diverse backgrounds, regardless of geographical location. The scale's capacity for cross-cultural adaptation highlights its significance in international settings. Worldwide organisations might employ the PLIAS to guarantee uniform leadership development strategies that are effective in many cultural contexts. This promotes the development of ethical leadership and helps align organisational values and behaviours on a global level.

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Annex 1: Final scale of PLIAS with factors and scoring

Sr. No.	Items	Reverse Coded Items	Factor Names
1	My manager/ supervisor is humble to employees.	Yes	
2	My manager/ supervisor shows a strong concern for ethical and moral values.	Yes	
3	My manager/ supervisor likes to follow the rules.	Yes	
4	My manager/ supervisor avoids responding to e-mail, telephone, or other messages to cause problems for someone else.	Yes	
5	My manager/ supervisor has high moral standards.	Yes	
6	My manager/ supervisor can be trusted with confidential information.	Yes	
7	My manager/ supervisor promotes employees in the organisation because of their ethical behaviour.	Yes	
8	My manager/ supervisor's behaviour inspires employees towards ethical dilemmas in meaningful ways.	Yes	Ethical Behavior
9	My manager/ supervisor actions reflect their moral beliefs.	Yes	
10	My manager/ supervisor's treats employees with dignity and values worthy suggestions.	Yes	
11	My manager/ supervisor regards honesty and integrity as important personal values.	Yes	
12	My manager/ supervisor acknowledges the ethical behaviour of employees.	Yes	
13	My manager/ supervisor terminates employees who show unethical behaviour.	Yes	
14	My manager/ supervisor discusses business ethics or values with employees.	Yes	
15	My manager/ supervisor shows unfair favouritism toward some employees.	No	
16	My manager/ supervisor try to destroy someone's career because of a grudge.	No	
17	My manager/ supervisor lies to employees.	No	Immoral Behavior
18	My manager/ supervisor tried to take credit for other people's ideas.	No	
19	My manager/ supervisor easily blackmails their employees.	No	
20	My manager/ supervisor exaggerates employee's mistakes to make them look bad to others.	No	
21	My manager/ supervisor does things that violate organisational policy and then expects others to cover for them.	No	Unethical Conduct

22	My manager/ supervisor is a hypocrite.	No	
23	My manager/ supervisor steals from the organisation.	No	
24	My manager/ supervisor puts their personal benefits ahead of the organisation.	No	
25	My manager/ supervisor misrepresent the words of others.	No	
26	My manager/ supervisor is not interested in tasks that don't bring personal glory or recognition.	No	
27	My manager/ supervisor spreads rumours or gossip to try hurt people or the organisation.	No	
28	My manager/ supervisor falsifies records if it would help their work situation.	No	
29	My manager/ supervisor listens to what employees have to say.	Yes	
30	My manager/ supervisor takes risks for employees to protect them in work matters.	Yes	
31	My manager/ supervisor gives employees the freedom to choose their own course of action.	Yes	Supportive Behavior
32	My manager/ supervisor treats some employees better if they are the opposite gender or belong to a different ethnic group.	Yes	
33	My manager/ supervisor decision has a positive impact on the organisation.	Yes	
34	My manager/ supervisor makes fair and balanced decisions.	Yes	Positive Attitude
35	My manager/ supervisor creates ease for employees.	Yes	

Table 1: Ratings of Experts, No. of Agreements, and Item-CVI for PLIAS

Items	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Expert 6	No. of Agreements	Item CVI
1.	1	4	4	3	4	4	5	0.83
2.	4	4	4	4	3	4	6	1
3.	1	4	3	4	3	3	5	0.83
4.	4	2	3	4	4	4	5	0.83
5.	1	3	4	4	4	4	5	0.83
6.	3	4	4	3	4	4	6	1
7.	1	1	2	3	2	3	2	0.33
8.	4	4	4	4	4	4	6	1
9.	3	4	4	4	4	4	6	1
10.	4	4	4	4	4	4	6	1
11.	1	4	4	4	4	4	5	0.83
12.	3	4	4	4	4	3	6	1
13.	1	3	4	3	3	3	5	0.83
14.	2	4	3	2	4	4	5	0.83
15.	4	4	3	3	4	3	6	1
16.	4	4	4	4	3	4	6	1
17.	1	3	4	4	4	4	5	0.83
18.	4	4	4	4	4	4	6	1
19.	1	3	4	4	4	4	5	0.83
20.	1	3	4	3	4	4	5	0.83
21.	4	2	3	4	4	4	5	0.83
22.	4	4	4	4	4	3	6	1
23.	4	4	4	3	4	3	6	1
24.	4	3	3	3	3	3	6	1
25.	4	4	4	3	4	3	6	1
26.	4	1	3	4	4	3	5	0.83
27.	4	1	3	4	3	4	5	0.83
28.	1	3	4	2	4	4	4	0.67
29.	1	4	4	4	4	3	5	0.83
30.	3	3	4	4	3	4	6	1
31.	3	3	4	4	4	4	6	1
32.	2	3	4	4	4	4	6	1
33.	1	4	4	4	3	4	6	1
34.	3	4	4	3	4	3	6	1
35.	4	4	4	3	4	4	6	1
36.	4	3	4	4	4	4	6	1
37.	4	4	4	4	4	4	6	1
38.	3	1	3	4	4	4	5	0.83
39.	4	4	4	4	4	4	6	1
40.	4	4	4	4	4	4	6	1

Table 2: Eigenvalue, Variance Percentage, and Cumulative Variance of 38 Items of Five Factor PLIAS Using Principle Component Analysis (N=500)

Sr. No.	Factors	Eigenvalue	% of variance	Cumulative %
1	EB	16.95	44.59	44.59
2	IB	5.78	15.22	59.81
3	UC	2.53	6.66	66.48
4	SB	1.64	4.30	70.78

5	PA	1.36	3.57	74.35
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Note. EB= Ethical Behaviour, IB= Immoral Behaviour, UC=Unethical Conduct, SB= Supportive Behaviour, PA=Positive Attitude.

Table 3: Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity (BTS) Values (N=500).

KMO Measure of Sampling Adequacy	.894
BTS Approx. Chi-Square	25904.533
Df	703
Sig	.000

* $p < .001$

Table 4: Factor Loadings Using Varimax Rotation (N=500).

Sr. No.	Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1.	PLI1	.805	.258	-.150	.185	.061
2.	PLI2	.797	.172	-.217	.177	.182
3.	PLI3	.793	.185	-.154	.202	.231
4.	PLI4	.716	.264	-.148	.190	.106
5.	PLI5	.701	.169	-.171	.041	.438
6.	PLI6	.657	.535	-.028	.296	.193
7.	PLI7	.647	.277	-.056	-.001	.096
8.	PLI8	.644	.244	-.176	.308	.128
9.	PLI9	.612	.571	-.051	.318	.197
10.	PLI10	.587	.247	-.164	.399	.416
11.	PLI11	.585	.278	-.189	.452	.193
12.	PLI12	.583	.563	-.047	.306	.203
13.	PLI13	.572	.340	-.182	.431	.240
14.	PLI14	.516	.301	-.206	.479	.371
15.	PLI15	.244	.937	.060	.110	.086
16.	PLI16	.248	.936	.059	.099	.074
17.	PLI17	.244	.931	.050	.133	.102
18.	PLI18	.248	.924	.052	.152	.093
19.	PLI19	.268	.891	.057	.115	.066
20.	PLI20	.592	.598	-.039	.305	.179
21.	PLI21	-.281	.024	.864	-.048	.009
22.	PLI22	-.274	.063	.842	-.008	-.105
23.	PLI23	-.210	.042	.838	.215	.141
24.	PLI24	-.287	.062	.830	-.092	-.123
25.	PLI25	.007	.032	.819	-.075	-.033
26.	PLI26	.175	.000	.807	-.174	-.320
27.	PLI27	.060	-.074	.758	.092	-.115
28.	PLI28	-.235	.034	.558	-.011	-.234
29.	PLI29	.101	.118	.121	.844	-.097
30.	PLI30	.245	.162	.035	.727	.212
31.	PLI31	.428	.287	-.170	.564	.291
32.	PLI32	.422	.276	-.097	.510	.467
33.	PLI33	.157	.070	-.068	-.058	.829
34.	PLI34	.276	.102	-.213	.190	.715
35.	PLI35	.361	.179	-.176	.337	.584
36.	PLI36	.338	.247	-.364	.451	.479
37.	PLI37	.397	.177	-.186	.492	.446
38.	PLI38	.316	.057	.263	.416	.002

Note. PLI= Perceived Leader's Integrity

Table 5: Factor Loadings of 35 Items of PLIAS for Five Factors Using Varimax Rotation and Inter-Item Total Correlations (N=500).

Sr#.	Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Item-Total Correlations
1.	PLI1	.805					.324**
2.	PLI2	.797					.463**
3.	PLI3	.793					.716**
4.	PLI4	.716					.411**
5.	PLI5	.701					.630**
6.	PLI6	.657					.307**
7.	PLI7	.647					.380**
8.	PLI8	.644					.742**
9.	PLI9	.612					.650**
10.	PLI10	.587					.780**

11.	PLI11	.585							.591**
12.	PLI12	.583							.724**
13.	PLI13	.572							.540**
14.	PLI14	.516							.731**
15.	PLI15		.937						.622**
16.	PLI16		.936						.431**
17.	PLI17		.931						.820**
18.	PLI18		.924						.745**
19.	PLI19		.891						.737**
20.	PLI20		.598						.701**
21.	PLI21			.864					.833**
22.	PLI22			.842					.592**
23.	PLI23			.838					.442**
24.	PLI24			.830					.753**
25.	PLI25			.819					.652**
26.	PLI26			.807					.709**
27.	PLI27			.758					.852**
28.	PLI28			.558					.653**
29.	PLI29				.844				.651**
30.	PLI30				.727				.742**
31.	PLI31				.564				.741**
32.	PLI32				.510				.861**
33.	PLI33					.829			.859**
34.	PLI34					.715			.682**
35.	PLI35					.584			.691**

Note. PLI= Perceived Leader's Integrity

Table 6: Inter-Correlation Matrix, Mean, Standard Deviation, and Cronbach's Alpha of Five Factors (N=500)

Sr. No.	Factors	M	SD	1	2	3	4	5	α
1.	EB	42.86	10.73	-	.672**	.321**	.722**	.616**	.963
2.	IB	16.74	5.74		-	.526**	.509**	.346**	.889
3.	UC	13.99	6.21			-	.331**	.341**	.924
4.	SB	11.55	3.16				-	.530**	.831
5.	PA	8.27	2.55					-	.769

Note. **p<0.1. M=Mean, SD=Standard Deviation, EB=Ethical Behaviour, IB=Immoral Behaviour, UC=Unethical Conduct, SB=Supportive Behaviour, PA=Positive Attitude

Table 7: Factor Loading for 35 Items of PLIAS with CFA (N=700).

Sr. No.	Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1.	PLI1	.805				
2.	PLI2	.797				
3.	PLI3	.793				
4.	PLI4	.716				
5.	PLI5	.701				
6.	PLI6	.657				
7.	PLI7	.647				
8.	PLI8	.644				
9.	PLI9	.612				
10.	PLI10	.587				
11.	PLI11	.585				
12.	PLI12	.583				
13.	PLI13	.572				
14.	PLI14	.516				
15.	PLI15		.937			
16.	PLI16		.936			
17.	PLI17		.931			
18.	PLI18		.924			
19.	PLI19		.891			
20.	PLI20		.598			
21.	PLI21			.864		
22.	PLI22			.842		
23.	PLI23			.838		
24.	PLI24			.830		
25.	PLI25			.819		
26.	PLI26			.807		
27.	PLI27			.758		
28.	PLI28			.558		

29.	PLI29	.844	
30.	PLI30	.727	
31.	PLI31	.564	
32.	PLI32	.510	
33.	PLI33		.829
34.	PLI34		.715
35.	PLI35		.584

Note. PLI= Perceived Leader's Integrity

Table 8: Model Fit Indices of CFA for PLIAS (N = 700)

Model	Df	χ^2	χ^2/df	TLI	CFI	GFI	RMSEA
5 Factors of PLIAS	550	1194.972	2.17	.90	.93	.95	.05

Note. df= Degree of Freedom, TLI= Tucker-Lewis Index, CFI= Comparative Fix Index, GFI= Goodness of Fit Index, RMSEA= Root Mean Square Error of Approximation, ***p<0.001

Table 9: Cronbach Alpha, Means and Standard Deviations of PLIAS (N=200)

Scales	K	α	M	SD
PLIAS	35	.93	134.31	16.14
EB	14	.83	49.29	6.17
IB	6	.68	20.49	3.14
UC	8	.77	28.81	3.75
SB	4	.72	14.21	2.39
PA	3	.65	11.02	1.61

Note. k= No. of items, α =Cronbach Alpha, M=Mean, SD=Standard Deviation, PLIAS= Perceived Leader's Integrity Scale, EB= Ethical Behaviour, IB= Immoral Behaviour, UC=Unethical Conduct, SB= Supportive Behaviour, PA=Positive Attitude

Table 10: Means, Standard Deviations, and the PLIAS/ALQ Correlation Coefficient (N=200)

Variables	M	SD	r
Perceived Leader's Integrity Scale (PLIAS)	134.31	16.14	
Authentic Leadership Questionnaire (ALQ)	63.88	10.53	.546**

Note. M=Mean, SD=Standard Deviation, p< .001**

Table 11: Means, Standard Deviations, and Correlation Coefficient between the PLIAS and Nepotism Scale (N=200)

Variables	M	SD	r
Perceived Leader's Integrity Scale (PLIAS)	134.31	16.14	
Nepotism Scale	17.31	4.37	-.386**

Note. M=Mean, SD=Standard Deviation, p< .001**

Figure 1: Scree Plot Displaying the Extraction of Factors for PLIAS

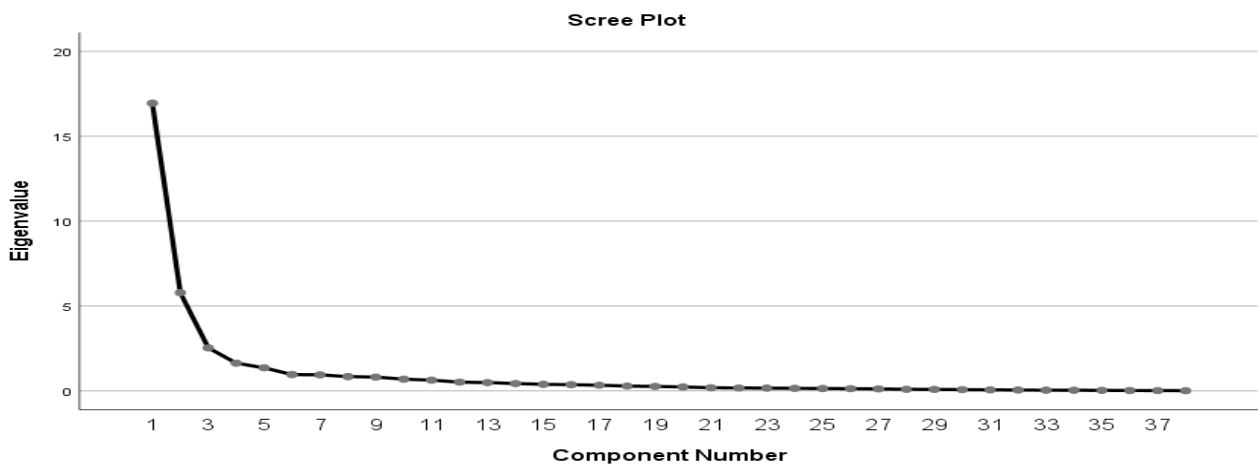


Figure 2: The Final Factor Model of the PLIAS (N=700)

