

# Emotional Intelligence and Interest in Leadership, Moderating Role of Age and Gender among Undergraduate Political Science Education Major Students in a Public University in Ghana

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## Abstract

The study was to examine the relationship between emotional intelligence and interest in leadership, moderating role of age, and gender among undergraduate political science students in a university in Ghana. The study used a cross-sectional survey design. Data was collected through an online survey from 165 undergraduate students at a university in Ghana. The data collection instrument consists of the Interest in Leadership Scale (ILS) and Emotional Intelligence measure (EI). The results revealed that emotional intelligence is significantly and positively correlated with interest in leadership. However, age and gender have no moderating effect on the relationship between emotional intelligence and interest in leadership in this study.

## **Keywords**

Emotional Intelligence, Interest, Leadership Interest, Political Science, Education

# **1. Introduction**

The role of teacher leadership is critical for the development of the needed human resource. Notwithstanding, the focus is always on developing leadership skills of in-service teachers with little to no attention by teacher training institutions to develop the leadership skills of pre-service teachers. Thus, the need to give attention to the development of leadership skills in pre-service teachers has become increasingly important. This is in part due to the growing calls for teachers to take on leadership roles both in and outside of the classroom (Issah & Al-Hattami, 2022). However, the yawning gap that has not been explored is whether pre-service teachers are indeed interested in assuming leadership roles as teachers.

Until recently, there was no validated measure for exploring the construct of interest in leadership (see Steele & Day, 2020). The current study is probably among very few studies to extend knowledge of the concept of ILS and other constructs. There is currently no empirical study establishing the relationship between the construct of Interest in Leadership (IL) and other relevant constructs such as emotional intelligence (Steele & Day, 2020). Furthermore, studies are yet to address the moderating role of age, gender, and minor area of specialization in the relationship between emotional intelligence and interest in leadership. However, no relationship exists between age, gender, tenure, and ILS, suggesting interest in leadership may be developed among the study participants independent of these demographic characteristics (Steele & Day, 2020).

#### 2. Literature Review

#### 2.1. Emotional Intelligence

Emotional Intelligence has over the years become a popular measure used to determine leader effectiveness (Rajee, Umma, & Kengatharan, 2020). According to Petrides, Mikolajczak, Mavroveli, Sanchez-Ruiz, Furnham, & Perez-Gonzalez (2016) emotions are subjective experiences permeating every aspect of human endeavour. At a theoretical level, emotional intelligence mirrors the extent to which a person attends to, processes, and acts on the information of emotional nature, intra-personally and interpersonally (Kafetsios, Maridaki-Kassotaki, Zammuner, Zampetakis, & Vouzas, 2009: p. 368). The research on emotional intelligence within the leadership domain has gained prominence over the last decade. Various definitions of the concept emerged depending on the field of study and the perspective of the researcher.

There are three perspectives or models of emotional intelligence, the ability model, the traits model, and the mixed ability model: 1) The ability model focuses on the ability of the individual to process emotional information and use it appropriately within the social environment; 2) The trait model focuses behavioural dispositions and self-perceived abilities; and 3) Mixed model describes the combination of mental abilities, dispositions and traits (personality traits and self-efficacy) (Călinici, Calinici, Balazsi, & Miclea, 2020). However, both perspectives agree that cognitive ability is not a distinct predictor of success within the ability to adapt which both experts and practitioners got to consider emotional competences as well (Issah, 2018: p. 2). According to Goleman (2004), emotional intelligence is "the ability to be aware of and handle one's emotions in varying situations" (p. 4). Emotional intelligence refers to understanding and recognition of oneself and others' abilities, perceptions, and attitudes (Momeni, 2009: p. 35). For example, emotionally intelligent leaders can employ their social skills in building and maintaining relationships ((Goleman, 2004) in Issah, 2018).

Trait emotional intelligence is about how we perceive our emotional abilities, that is, the extent to which we understand, regulate, and express our emotions to maintain our environment and maintain wellbeing (Petrides et al., 2016). Proponents of the trait/mixed ability models focus on the relationship between emotion-related personality traits and the environmental context (Kafetsios et al., 2009). For example, emotional intelligence is conceptualized as a set of competences measured by self-assessed or peer assessed behaviour structured instruments (Boyatzis, Goleman, & Rhee, 2000). Drawing on research from children samples, Petrides et al. (2016), noted with clarity that the foundations of the multifaceted role of trait EI in the life domains are laid down in childhood. According to Jan, Anwar, & Warraich (2020), "emotions directly affect the academic learning process, behaviour, psychological health, and human relationships" (p. 238).

#### 2.2. Interest in Leadership

Hidi (1990), argues that interest is central in determining what people select and persist in processing types of information in preference to others, and that interest plays a central role in the cause and outcome of our mental activities. Hidi (1990), further suggested that "the concept of interest should be recognized as an integral part of cognition and incorporated into expanded theories on the subject" (p. 549). According to Silvia (2001), "interest is the self-sustaining motivation that leads people to engage with certain objects, activities or ideas for "their own sake" (p. 270). The function of interest is to motivate people to learn and explore. By motivating people, it ensures that people develop a broad set of knowledge, skills, and experience (Silvia, 2008). The calls for extending the theories of cognition as early as the 1980s to include environmental and energetic aspects of information processing led to two views of the concept of interest. View "1) that in some sense a person is the final arbiter of his or her interest, view 2) the interests of a person promote his or her good" (Swanton, 1980: p96). Interest is thus, conceptualized as resulting from an interaction between an energized individual and the external world, representing the two aspects of cognition that have been neglected (Hidi, 1990). Thoman, Smith, & Silvia (2011), suggests that the psychological resources harnessed by interest also influence motivation towards an unrelated task. The authors concluded that interest is both an important motivational variable for specific-person activity and may replenish those motivational resources far beyond the context that sparked it.

Individual interest always involves stored knowledge and value and may or may not be a psychological state of which the individual is reflectively aware. Here, knowledge refers to cognitive representations stored from experience; value refers to related affective responses, such as a feeling of competence. According to this view, individual interests and related knowledge are interdependent factors that develop hand in hand and influence how the individual engages in current as well as in subsequent tasks (Hidi, 1990: p. 554).

Accordingly, people will find an event interesting if they appraise the event as new and comprehensible (Silvia, 2008). Interest is considered distinct from general positive affect and other positive emotions such as happiness. Whereas happiness builds attachment to familiar sources of rewards, interest on the other hand motivates engaging with things that are new, unfamiliar, and potentially unrewarding (Thoman, Smith, & Silvia, 2011). The current study shares in the conception of interest as resulting from the interaction between the individual and the environment as suggested by some psychologists (see, Hidi, 1990; Silvia, 2008; Swanton, 1980), because both aspects of interest can influence each other's development (Hidi, 1990).

#### 2.3. Emotional Intelligence (EI) and Interest in Leadership (ILS)

The possible association between emotional intelligence and interest in leadership is yet to be explored in the leadership domain, there is existing literature in other fields of the concepts of interest and emotions. No studies were located that explicitly show the association between emotional intelligence and interest in leadership. However, some studies provide evidence of an association between some relevant concepts and interest. For example, in a study to explore whether emotions spark interest in alternative tobacco products, the study found positive emotions were consistently associated with interest in alternative tobacco (Popova, So, Sangalang, Neilands, & Ling, 2017). Similarly, social potency directly predicted leadership efficacy, leadership interest as well as two factors of leadership intentions of young women in America (Baker, Larson & Surapaneni, 2016). According to Sherlock (2002), individual competences of self-awareness, self-understanding, and self-regulation lead to the development of social competences of teamwork, leadership, communication, and conflict resolution (p. 139).

In a visual art study, complexity and comprehension appraisals significantly and strongly predicted interest at the within-person level (Silvia, 2006). As Silvia (2008) suggested, "people seem to understand that interest enhances their motivation and performance" (p. 58). Interest in leadership may spur individuals on to acquire knowledge and develop the skills necessary for emotional intelligence. In addition to promoting growth, "interest supports the "possible" by promoting the continuous development of knowledge and skills" (Silvia, 2001: p, 273). According to Hermans & Prins (2020), "interest moderated the relationship between constructive news and positive emotions" (p. 14). Also, the study showed that participants more interested in news, showed higher levels of positive and inspirational emotions. However, age, gender, and educational level were not significantly related to interest in news and emotions (Hermans & Prins, 2020). Steele & Day (2020), reported significant a positive relationship between interest in leadership and subordinates, leadership emergence, and transformational leadership while reporting a significant negative relationship between passive/avoidant and interest in leadership ratings.

### 3. Purpose of the Study

The primary objective of the current study was to examine the relationship between emotional intelligence and interest in leadership, and the moderating role of age, gender, and minor area of specialization. The concept of interest in leadership is relatively new in leadership research. Though no study of the association between emotional intelligence and interest in leadership was found, Silvia (2006), raised the possibility that appraisal is associated with interest may be activated during the interest experience and subsequently applied to future activities. However, research in education has linked interest to learning, academic achievement, and reading comprehension (see Asher, 1979; Hidi, 1990 and Daud, Rahman, & Mohamad, 2019). The significance of the present study fills a knowledge gap in existing literature on leadership studies. In addition, the findings of the study serve as the foundation for further studies on the relations between emotional intelligence and leadership in other disciplines. Furthermore, the results of the study may encourage the integration of emotional intelligence in undergraduate programs to promote interest in leadership. The study addressed the following questions below.

## 4. Research Questions

1) What is the relationship between Emotional Intelligence (EI) and interest in leadership (ILS)?

2) What are the moderating roles of age and gender in the relationship between EI and ILS?

#### 5. Method

The study examined the relationship between emotional intelligence and interest in leadership, and the moderating role of age, gender, and minor area of specialization. The study adopted a quantitative approach with a cross-sectional design. The cross-sectional survey design is appropriate for the study because the study is to describe the relations among psychological variables, and or self-reported behaviours (Passer, 2017). The study adapted two existing measures in collecting data. The Emotional Intelligence (EI) measure (Schutte, Malouff, Hall, Haggerty, Cooper, Golden, & Liane, 1998), and the Interest in Leadership Scale (ILS) (Steele & Day, 2020). The EI measure is a 33-item measure. The EI is a validated measure with the internal consistency of a Cronbach's alpha of 0.90 for the 33-item scale (Schutte et al, 1998). The EI is a five-point Likert-Scale, from 1-strongly disagree to 5-strongly agree. Self-report ability-based scales are probably the best in terms of psychometric properties, predictive power, and friendly use (Cälinici, Calinici, Balazsi, & Miclea, 2020). The Interest in Leadership Scale (ILS) is a 7-item measure with a person separation reliability index (PSI) of 0.89 (Steele & Day, 2020). The ILS is a 5-point liker-scale, from 1-strongly disagree to 5-strongly agree. The participants of the study are undergraduate students majoring in political science. One hundred and sixty-five (165) students participated in the study. The participants completed an online questionnaire consisting of the EI and IL measures. The participants completed the questionnaire by indicating their level of agreement or disagreement with the statements on both measures. Data analysis was conducted in SPSS and the results of the analysis presented below.

## 6. Results

Descriptive statistics were conducted for the variables of the study. The statistics include; mean, standard deviation, and correlation. Initially, the demographic characteristics of the participants are presented in **Table 1**. The participants consist of 45 (27.3%) women and 120 (72.7%) males. In addition to the major area of specialization (Political Science) majority (33.9%) of the students indicated social science as a minor area of specialization (see **Table 1**).

**Table 2** is a presentation of the descriptive statistics of emotional intelligence, interest in leadership, and age. All three variables have mean and standard deviation much closer to the maximum scores for the respective variables. The mean age of the participants ranges from a minimum of 19 years to a maximum of 43 years, and mean age of 24.60, and a standard deviation of 4.01 (see **Table 2**).

The mean comparison of the main variables by gender is presented in **Table 3**. The *t-test* results indicate no statistically significant difference between male and female students in emotional intelligence. Similarly, there is no statistically significant difference in interest in leadership by gender. Thus, the effect of the independent variable gender on the dependent variable interest in leadership was not significant.

In **Table 4**, the correlation matrix of EI, IL, and age is presented. The relationship between emotional intelligence and interest in leadership is positive and statistically significant ( $\alpha = 0.01$ , p = 0.000, r = 0.323). Indicating that an increase in emotional intelligence will probably lead to an increase in interest in leadership. There was no statistically significant correlation between age, EI, and IL. However, there is a negative relationship between age and interest in leadership, though not statistically significant. It does indicate that the older the participants get, the lower their interest in leadership.

A regression analysis was conducted as seen in **Table 5** to determine the effect of age and emotional intelligence on interest in leadership. The model reveals that the effect of age on interest in leadership is not significant. However, emotional intelligence can explain the changes in the level of interest in leadership and a significant predictor in the regression model. As seen in **Table 5**, the effect of emotional intelligence on interest in leadership is 0.152. The results show that emotional intelligence positively and significantly predicts interest in leadership.

| Variable                     | Category          | Frequency | Percent |
|------------------------------|-------------------|-----------|---------|
| Gender                       |                   |           |         |
|                              | Male              | 120       | 72.7    |
|                              | Female            | 45        | 27.3    |
| Total                        | 165 100           |           | 100     |
| Ainor area of specialization |                   |           |         |
|                              | Geography         | 42        | 25.5    |
|                              | Social studies    | 56        | 33.9    |
|                              | Economics         | 24        | 14.5    |
|                              | History           | 20        | 12.1    |
|                              | Political science | 16        | 9.7     |
|                              | Others            | 7         | 4.2     |
| Total                        |                   | 165       | 100     |

Table 1. Distribution of participants by gender and minor area of specialization.

#### Table 2. Descriptive statistics of EI, IL, and age.

| Variable                     | Mean ± Standard Deviation | Minimum | Maximum |
|------------------------------|---------------------------|---------|---------|
| Emotional Intelligence (EI)  | $135.36 \pm 11.15$        | 99      | 161     |
| Interest in Leadership (ILS) | $29.10\pm5.17$            | 9       | 35      |
| Age                          | $24.60\pm4.01$            | 19      | 43      |

### Table 3. Comparison of the mean of the variables between males and females.

| Variable               | Gender | Mean ± Standard Deviation | <i>P</i> -value <sup>a</sup> |
|------------------------|--------|---------------------------|------------------------------|
| Emotional Intelligence | Male   | Male 136.2941 ± 10.83963  |                              |
|                        | Female | $132.8667 \pm 11.79484$   |                              |
| Interest in Leadership | Male   | 29.1092 ± 5.55068         | 0.836                        |
|                        | Female | $29.1333 \pm 4.08768$     |                              |

<sup>a</sup>By t-test between two independent samples.

### Table 4. Correlation matrix of variables (ILS, EI & Age).

| Correlations |                     |         |         |        |  |
|--------------|---------------------|---------|---------|--------|--|
|              |                     | ILS     | EI      | Age    |  |
| ПC           | Pearson Correlation | 1       | 0.323** | -0.034 |  |
| ILS          | Sig. (2-tailed)     |         | 0.000   | 0.662  |  |
|              | Pearson Correlation | 0.323** | 1       | 0.073  |  |
| EI           | Sig. (2-tailed)     | 0.000   |         | 0.354  |  |
| Age          | Pearson Correlation | -0.034  | 0.073   | 1      |  |
|              | Sig. (2-tailed)     | 0.662   | 0.354   |        |  |

\*\*Correlation is significant at the 0.01 level (2-tailed).

|   | Model      | e notan | dardized<br>ficients | Standardized<br>Coefficients | t Sig. |       | Collinearity<br>Statistics |       |
|---|------------|---------|----------------------|------------------------------|--------|-------|----------------------------|-------|
|   | _          | В       | Std. Error           | Beta                         |        |       | Tolerance                  | VIF   |
|   | (Constant) | 10.404  | 5.092                |                              | 2.043  | 0.043 |                            |       |
| 1 | Age        | -0.075  | 0.096                | -0.058                       | -0.780 | 0.437 | 0.995                      | 1.005 |
|   | EI         | 0.152   | 0.035                | 0.327                        | 4.395  | 0.000 | 0.995                      | 1.005 |

Table 5. Regression of EI and age as predictors of ILS

<sup>a</sup>Dependent variable: ILS.

## 7. Discussion

In the present study, the relationship between emotional intelligence and interest in leadership among undergraduate students was examined. There was a statistically positive correlation between emotional intelligence and interest in leadership. Thus, as emotional intelligence increases among the participants, their interest in leadership increases. This indicates that emotional intelligence predicts interest in leadership. The finding from the present study is consistent with findings in studies that examined emotions and interest constructs. For example, as Steele & Day (2020) indicated in their study, interest in leadership relates to relevant organizational measures.

There is no statistically significant difference in interest in leadership between the male and female participants in the study. Thus, gender does not affect participants in interest in leadership (Meshkat & Nejati, 2017). Also, there was no statistically significant difference in age and interest in leadership among participants of the study. Interestingly, the relationship was negative, suggesting that interest in leadership may probably decrease with age. This study is one of very few if not the only study to examine the relationship between emotional intelligence and interest in leadership, and the moderating role of age and gender on the relationship. As a cross-sectional study, it will be worthwhile for other studies to confirm the relationship. The conclusion of the present study is limited to the study sample, therefore, future studies should consider conducting the study in different populations.

The findings of this study are relevant for future research and practice. Being able to determine the emotional intelligence of undergraduate students would be an essential value for practitioners to identify individuals who may be interested in leadership. In conclusion, in the study population, there is a statistically positive relationship between emotional intelligence and interest in leadership. Undergraduate political science students' interest in leadership increases with an increase in emotional intelligence. Also, the independent variables of age and gender have no statistically significant influence on the study population's emotional intelligence and interest in leadership. The conclusion of the present study is limited to leadership in education, and therefore, it recommends that future studies should consider exploring emotional intelligence and interest in leadership in other disciplines.

## **Conflicts of Interest**

The authors of the manuscript declare no conflict of interest.

#### References

- Asher, S. R. (1979). Influence of Topic Interest on Black Children's and White Children's Reading Comprehension. *Child Development, 50*, 686-690. https://doi.org/10.2307/1128933
- Baker, D. F., Larson, L. M., & Surapaneni, S. (2016). Leadership Intentions of Young Women: The Direct and Indirect Effects of Social Potency. *Journal of Career Assessment, 24*, 718-731. <u>https://doi.org/10.1177/1069072715616124</u>
- Boyatzis, R. E., Goleman, D., & Rhee, K. S. (2000). Clustering Competencies in Emotional Intelligence. In R. Bar-On, & J. D. Parker (Eds.), *The Handbook of Emotional Intelligence* (pp. 343-362). Jossey-Bass.
- Călinici, M. S., Călinici, T., Balazsi, R., & Miclea, M. (2020). Development and Validation of a New Ability-Based Measure of Emotional Intelligence: Cluj Emotional Intelligence Scale (CEIS). *Cognition, Brain, Behavior. An Interdisciplinary Journal, 24*, 335-363. https://doi.org/10.24193/cbb.2020.24.18
- Daud, Y., Rahman, M. J. A., & Mohamad, R. (2019). Relationships between the Usage of ICT, Attitudes, Behavior, and Interest towards Achievement in Chemistry among form Four Students. *Creative Education*, 10, 2574-2583. https://doi.org/10.4236/ce.2019.1012185
- Goleman, D. (2004). What Makes a Leader? Harvard Business Review, 82, 82-91.
- Hermans, L., & Prins, T. (2020). Interest Matters: The Effects of Constructive News Reporting on Millennials' Emotions and Engagement. *Journalism*, 1-18. <u>https://doi.org/10.1177%2F1464884920944741</u>
- Hidi, S. (1990). Interest and Its Contribution as a Mental Resource for Learning. *Review* of Educational Research, 60, 549-571. <u>http://www.jstor.com/stable/1170506</u> <u>https://doi.org/10.3102/00346543060004549</u>
- Issah, M. (2018). Change Leadership: The Role of Emotional Intelligence. *SAGE Open, 8,* 6 p. https://doi.org/10.1177/2158244018800910
- Issah, M., & Al-Hattami, A. (2020). Developing Leadership Skills in the Classroom. In O. Al Madhi (Ed.), *Innovations in Educational Leadership and Continuous Teachers' Professional Development* (pp. 39-58). CSMFL. https://doi.org/10.46679/isbn978819484832502
- Jan, S. U., Anwar, M. A., & Warraich, M. F. (2020). The Relationship between Emotional Intelligence, Library Anxiety, and Academic Achievement among the University Students. *Journal of Librarianship and Information Science*, 52, 237-248. <u>https://doi.org/10.1177/0961000618790629</u>
- Kafetsios, K., Maridaki-Kassotaki, A., Zammuner, V., Zampetakis, L., & Vouzas, F. (2009). Emotional Intelligence Abilities and Traits in Different Career Paths. *Journal of Career Assessment*, 17, 367-383. https://doi.org/10.1177/1069072709334233
- Meshkat, M., & Nejati, R. (2017). Does Emotional Intelligence Depend on Gender? A Study on Undergraduate English Majors of Three Iranian Universities. *SAGE Open*, *7*, 8 p. https://doi.org/10.1177/2158244017725796
- Momeni, N. (2009). The Relationship between Managers' Emotional Intelligence and the Organizational Climate They Create. *Public Personnel Management, 38*, 35-48.

https://doi.org/10.1177/009102600903800203

Passer, M. W. (2017). Research Methods: Concepts and Connections (2nd ed.). Macmillan.

- Petrides, K. V., Mikolajczak, M., Mavroveli, S., Sanchez-Ruiz, M. J., & Perez-Gonzalez, J. C. (2016). Developments in Trait Emotional Intelligence Research. *Emotion Review*, *8*, 335-341. <u>https://doi.org/10.1177/1754073916650493</u>
- Popova, L., So, J., Sangalang, A., Neilands, T. B., & Ling, P. M. (2017). Do Emotions Spark Interest in Alternative Tobacco Products? *Health Education & Behavior, 44*, 598-612. <u>https://doi.org/10.1177/1090198116683169</u>
- Rajee, R. F., Umma, M. A. G. S., & Kengatharan, N. (2020). Impact of Emotional Intelligence on Transformational Leadership of Academic Heads of State Universities in Eastern Province of Sri Lanka. *Journal of Critical Review, 7*, 2987-3003.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Liane, D. (1998). Development and Validation of a Measure of Emotional Intelligence. *Personality and Individual Differences, 25,* 167-177. https://doi.org/10.1016/S0191-8869(98)00001-4
- Sherlock, P. (2002). Emotional Intelligence in the International Curriculum. *Journal of Research in International Education*, *1*, 139-158. https://doi.org/10.1177/147524002764248112
- Silvia, P. J. (2001). Interest and Interests: The Psychology of Constructive Capriciousness. *Review of General Psychology, 5,* 270-290. https://doi.org/10.1037/1089-2680.5.3.270
- Silvia, P. J. (2006). Cognitive Appraisals and Interest in Visual Art: Exploring an Appraisal Theory of Aesthetic Emotions. *Empirical Studies of the Arts, 23*, 119-133. https://doi.org/10.2190/12AV-AH2P-MCEH-289E
- Silvia, P. J. (2008). Interest: The Curious Emotion. Current Directions in Psychological Research, 17, 57-60. <u>https://doi.org/10.1111/j.1467-8721.2008.00548.x</u>
- Steele, A. R., & Day, D. V. (2020). Development and Preliminary Validation of the Interest in Leadership Scale. SAGE Open, 10, 12 p. https://doi.org/10.1177/2158244019900182
- Swanton, C. (1980). The Concept of Interests. *Political Theory, 8*, 83-101. https://doi.org/10.1177/009059178000800107
- Thoman, D. B., Smith, J. L., & Silvia, P. J (2011). The Resource Replenishment Function of Interest. Social Psychological and Personality Science, 2, 592-599. <u>https://doi.org/10.1177/1948550611402521</u>