



# The interaction between Emotional Intelligence, Transformational Leadership and Organisational Effectiveness: a Mediation Model

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## Introduction

As organisations face growing pressures to enhance their performance, predict challenges, and shape new organizational structures, good leadership emerges as essential to guarantee that innovation results in enhanced efficacy, success, productivity, effectiveness, and profitability (Pittaway et al., 1998). While it cannot be taken for granted that “better” leadership automatically results in “better” company success, knowledge of the link between leadership and business performance is necessary (Mullins, 2007).

Transformational leadership is perhaps the most researched style of leadership. In the present global environment, transformational leadership appears as a feasible answer for enterprises globally to deal with the resulting demands and problems (Al-Amin, 2017). Indeed, there is accumulating affirmation demonstrating transformational leadership’s significant benefits on a range of business results compared to the working environment, employee success, and organizational results (Bezzina et al., 2020; Gold et al., 2001; Manzoor et al., 2019).

This quantitative study sought to investigate the association between transformational leadership, an important transformational leadership antecedent (namely, emotional intelligence), and organisational effectiveness. The



study targeted employees hailing from two entities that form part of the Maltese public sector - the Malta Tourism Authority, and Heritage Malta. Emotional intelligence (a leadership characteristic) was chosen as an antecedent of transformational leadership since it is generally acknowledged that it is important for flexibility and future success, in terms of long-term leadership endurance (Avolio, 1994). The study also attempted to investigate whether transformational leadership plays a mediating role in the relationship between emotional intelligence and organizational effectiveness.

## 2. Literature review

### 2.1 Transformational Leadership and its components

Transformational leadership has been defined as a type of leadership that is capable of transforming employees into individuals who feel competent and driven and who aspire for performance and job satisfaction (Yukl, 2013). This type of leadership is characterised by the presence of four distinct components - idealised influence, individualised consideration, inspirational motivation, and intellectual stimulation. (Avolio and Bass, 2001). Transformational leadership is often confused with transactional leadership which focuses on compliance through the withholding and providing of benefits and rewards (Herrity, 2021). Hence, contrary to transactional leaders, transformational leaders look at the long term and inspire overall change in a way that benefits the whole organisation (Barling et al., 2000).

According to Avolio (1994), transformational leadership is associated with three groups of antecedents: (1) the leader's characteristics (e.g., personality, beliefs, attributes, emotional intelligence); (2) organizational characteristics (e.g., organizational justice); and (3) the leader's colleagues' characteristics. This study will incorporate emotional intelligence as a critical leadership attribute and an antecedent of transformational leadership.

### 2.2 Emotional Intelligence

Emotional intelligence has been defined as “the ability to understand and manage your own emotions, as well as recognize and influence the emotions of those around you” (Landry, 2019). Since nowadays, most employees are confronted with emotionally taxing jobs and obligations, emotional intelligence becomes critical. (Lee, 2018). Emotional Intelligence is a critical aspect that contributes to increased capability for attaining organizational and professional goals, as well as greater collaboration via mutual trust and respect (Arfara and Samanta, 2016). Emotionally intelligent employees have a much more optimistic outlook, and seem more satisfied, committed, and devoted to their careers and organization, which generates a congenial atmosphere conducive to increased work performance and job satisfaction (Miao et al., 2017). In the competence-based model of Emotional Intelligence, Goleman (2001) highlighted 20 competencies that can be grouped under the following four general abilities: self-

awareness, self-management, social awareness, and relationship management. Studies have also shown that emotional intelligence is strongly related to transformational leadership (Barling et al, 2000; Gardner and Stough, 2002; Li et al., 2018). However, others have been critical of this relationship. For instance, Hunt and Fitzgerald (2013) reviewed twenty-two published papers and concluded that the relationship yields mixed results, especially when one considers methodological limitations (e.g. sample sizes and data sources) of the studies and whether trait-based or ability/cognitive measurement instruments of emotional intelligence were used.

### 2.3 Organisational Effectiveness

The term organisational effectiveness refers to the degree to which a company can achieve its goals by making use of specific capabilities in a manner that does not exhaust those resources or place an excessive amount of strain on the organization's people or community.

In principle, leadership is strongly connected with a range of organizational results; however, one result that has obtained a significant interest in the research on transformational leadership research has been the effectiveness of the organization. This is because the transformational leadership literature has focused primarily on this result (Bezzina et al., 2020; Gold et al., 2001). When it comes to leadership styles, there are several to choose from in academia, but transformational leadership is among the most often used in companies today, and it has a substantial

influence on overall organizational performance. Transformational leadership, according to Bass (1985), is one of the most successful approaches to increasing the performance of people and organizations. Transformational leaders motivate and encourage their teams to work hard and take advantage of both current and new possibilities. Followers of transformational leaders are assisted in constructively attaining higher objectives by these leaders (Antonakis et al., 2003). The followers of transformational leaders are motivated to think about matters other than their interests by these leaders. (Bass, 1999). Employees are engaged and stimulated when they work in an atmosphere that fosters transformational leadership (De Jong & Bruch, 2013). Motivation and a pleasant workplace atmosphere lead to improved customer service, which in turn promotes organizational success and results in financial benefits for investors (Al-Amin, 2017; Manzoor et al., 2019). Given that the literature supports a positive interaction between transformational leadership and its antecedents to organisational effectiveness, I posit that:

**H1:** Emotional intelligence has a direct effect on Transformational Leadership.

**H2:** Transformational Leadership has a direct effect on Organisational Effectiveness.

**H3:** Emotional intelligence has a direct effect on Organisational Effectiveness.

**H4:** Transformational Leadership mediates the relationship between Emotional Intelligence and Organisational Effectiveness.

The conceptual framework that I will be adopting is illustrated in Figure 1 below.





Figure 1: Conceptual Framework

### 3. Method

#### 3.1 The Sample

This cross-sectional study adopted a positivist stance (Bryman & Bell, 2011). The population of interest consisted of employees who worked at the Malta Tourism Authority and Heritage Malta. This excluded the chairman or anyone else who held a managerial position since the questionnaire contained an evaluation of leadership skills and characteristics and hence limit the possibility of self-rating bias. After obtaining consent from the administration of these entities, an email with a link to the online survey was sent by the Heads of the HR department to the employees to solicit their participation in the study. Additionally, a follow-up email was sent one week later in order to increase staff participation. In total, 159 complete questionnaires were received. This met the minimum sample size of 150 required for path analysis (the statistical technique used to analyse the data) as recommended by Muthén and Muthén (2002). The majority of the respondents were male (55.3%) and in full-time employment (95.6%). Their median age was 36.6 years (SD = 8.7) with ages ranging from 19 to 64.

#### 3.2 The Research Instrument

The questionnaire contained two sections. The first section asked for demographic data about the respondents. The second section contained items pertaining to three established constructs. More information is provided in Table 1 below.

Table 1: Information on Constructs used

Construct	Source	Items	Cronbach $\alpha$
Emotional Intelligence	Brief Emotional Intelligence Scale (Davies et al., 2020)	10	0.73
Transformational Leadership	Global Transformational Leadership Scale (Carless et al., 2000)	7	0.91
Organisational Effectiveness	Organisational Effectiveness Scale (Gold et al., 2001)	14	0.94

For each construct, respondents were asked to indicate their level of agreement on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). All constructs provided Cronbach alpha coefficients that exceeded 0.70, thereby providing evidence of the internal consistency reliability of these measures.

### 3.3 Data Analysis Procedure

The statistical software package SPSS Version 27 with the PROCESS macro-Version 4.1 by Andrew F. Hayes (© 2012-2022) as an add-in was used to conduct and investigate the research hypotheses. In a preliminary analysis, descriptive statistics and correlations between the study variables were generated. To test for direct and indirect effects, Model 4 for simple mediation (see Figure 2) of Hayes' Process Macro was utilised. Here, X = Emotional Intelligence, M = Transformational Leadership and Y = Organisational Effectiveness. To investigate direct effects (Hypotheses 1 to 3), the significance of the regression coefficient was interpreted – here, a p-value of 5% or less was interpreted as statistically significant. To investigate indirect effects (Hypothesis 4), the 'user defined effects estimand' was used, with bias-corrected bootstrapping samples (5000 samples) and 95% bootstrapping confidence intervals for the unstandardized indirect effects (Hayes, 2013). Here, if both ends of the continuum would have the same sign (+ or -) and hence no zero, then the mediating effect would be statistically significant (Hayes, 2013).

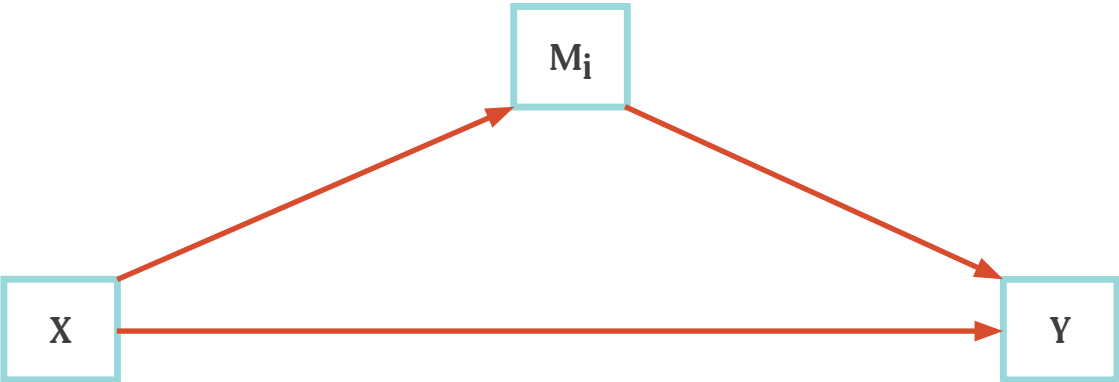


Figure 2: Simple Mediation Model 4.  
Source: Hayes 2013.

## 4. Results

### 4.1 Preliminary Analysis: Descriptive Statistics and Correlations

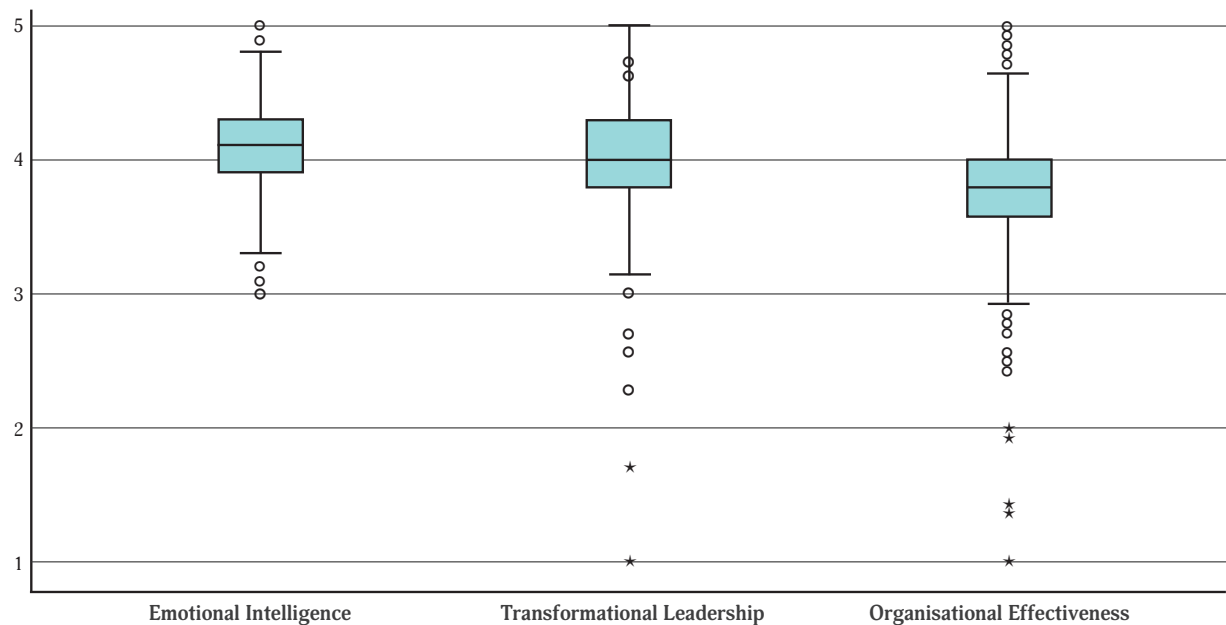
Table 2 provides a descriptive summary of the study's main variables. On average, the respondents reported high levels of emotional intelligence, transformational leadership and organisational effectiveness, although scores ranged from 1 (lower end of the scale) to 5 (upper end of the scale), with the exception of emotional intelligence which ranged from 3 to 5.



**Table 2:** Descriptive Statistics.

Construct	N	Min-Max	Median	Mean (SD)	95% CI
Emotional Intelligence	159	3.00-5.00	4.10	4.07 (0.39)	(4.01, 4.13)
Transformational Leadership	159	1.00-5.00	4.00	3.97 (0.65)	(3.88, 4.06)
Organisational Effectiveness	159	1.00-5.00	3.79	3.74 (0.64)	(3.64, 3.84)

The distribution of scores for emotional intelligence, transformational leadership and organisational excellence is illustrated graphically via the Box Plots in Figure 3.



**Figure 3:** Box-Plots showing distributions of constructs' scores

Finally, in preliminary analysis, the zero-order correlations between the three study variables were examined. These are presented in Table 3 below.

**Table 3:** Correlation matrix.

Construct	EI	TL	OE
Emotional Intelligence (EI)	1.00	0.21**	0.17*
Transformational Leadership (TL)	-	1.00	0.60**
Organisational Excellence (OE)	-	-	1.00

\*\* correlation significant at the 0.01 level (2-tailed); \* correlation significant at the 0.05 level (2-tailed); N = 159.

All the bi-variate correlations were statistically significant indicating positive linear relationships between the three variables. This supported further investigation via path analysis.

## 4.2 Path Analysis

The statistical output using Model 4 in Hayes' Process macro is shown in Figure 4.

Figure 4 revealed that there were significant direct effects of:

- (i) Emotional Intelligence on Transformational Leadership ( $p < 0.01$ ), thereby providing empirical evidence that supports *Hypothesis 1*; and
- ii) Transformational Leadership on Organisational Effectiveness ( $p < 0.001$ ), thereby providing empirical evidence that supports *Hypothesis 2*;

However, the direct path from Emotional Intelligence to Organisational Effectiveness was not statistically significant, thereby providing empirical evidence that rejects *Hypothesis 3*.

Figure 4 also revealed that Transformational Leadership mediated the relationship between Emotional Intelligence and Organisational Effectiveness, since the lower limit (i.e., 0.04) and upper limit (i.e., 0.39) of the bootstrapped 95% Confidence interval were both positive and the 95% Confidence Interval did not contain a zero (Hayes, 2013). This significant indirect effect provided empirical evidence that supports *Hypothesis 4*. Since the direct effect of Emotional Intelligence on Organisational Effectiveness was not significant, then one can conclude that this is a case of complete mediation; that is, "X no longer affects Y after M has been controlled" (Kenny, 2021).



## Articles by Students

Run MATRIX procedure:

\*\*\*\*\* PROCESS Procedure for SPSS Version 4.1 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D.                      www.afhayes.com  
Documentation available in Hayes (2022). www.guilford.com/p/hayes3

\*\*\*\*\*

Model : 4  
Y : OE  
X : EI  
M : TL

Sample  
Size: 159

\*\*\*\*\*

OUTCOME VARIABLE:  
TL

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.2121	.0450	.4158	7.3926	1.0000	157.0000	.0073

Model						
	coeff	se	t	p	LLCI	ULCI
constant	2.5275	.5332	4.7405	.0000	1.4744	3.5806
EI	.3545	.1304	2.7189	.0073	.0970	.6119

\*\*\*\*\*

OUTCOME VARIABLE:  
OE

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.6060	.3672	.2639	45.2687	2.0000	156.0000	.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	1.1435	.4541	2.5181	.0128	.2465	2.0405
EI	.0720	.1063	.6777	.4989	-.1379	.2819
TL	.5805	.0636	9.1314	.0000	.4549	.7061

\*\*\*\*\* DIRECT AND INDIRECT EFFECTS OF X ON Y \*\*\*\*\*

Direct effect of X on Y						
	Effect	se	t	p	LLCI	ULCI
	.0720	.1063	.6777	.4989	-.1379	.2819

Indirect effect(s) of X on Y:				
	Effect	BootSE	BootLLCI	BootULCI
TL	.2058	.0893	.0418	.3938

\*\*\*\*\* ANALYSIS NOTES AND ERRORS \*\*\*\*\*

Level of confidence for all confidence intervals in output:  
95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:  
5000

----- END MATRIX -----

Figure 4: Process Macro Output for Model

## 5. Discussion

This study supports previous studies that reported the positive direct effects between (i) emotional intelligence and transformational leadership (e.g. Avolio, 1994; Barling et al., 2000; Gardner and Stough, 2002), (ii) emotional intelligence and organisational effectiveness (e.g. Arfara and Samanta, 2016; Li et al., 2018; Miao et al., 2017) and (iii) transformational leadership and organisational effectiveness (Al-Amin, 2017; Bass, 1985; Gold et al., 2001; Manzoor et al., 2019). Furthermore, this study shows that transformational leadership mediates the relationship between emotional intelligence and organisational effectiveness.

In practical terms, these findings provide empirical evidence that emotional intelligence is a milestone to effective transformational leadership since such leaders can manage their emotions and convey them in a meaningful way and, in turn, this promotes organizational effectiveness. The good news for organisations is that both emotional intelligence and transformational leadership can be developed and nurtured, and there are various interventions available that can improve employees'/managers' emotional intelligence (e.g. see Slaski and Cartwright, 2003) and transformational leadership skills (e.g. see Richter et al., 2015). This suggests that it would be profitable if policymakers find ways to bolster the emotional intelligence and transformational leadership skills of their employees in their quest to improve their organisation's performance/effectiveness.

## 6. Concluding note

This study, like any other study, has a number of limitations. However, from these, some interesting avenues for further research emerge. Firstly, the study was conducted in only two Maltese public sector entities, and further research incorporating other entities could address the issue of generalisability. Secondly, this study utilised only a single transformational leadership antecedent. Further research could incorporate various other important antecedents of transformational leadership such as self-efficacy, organisational fairness and organisational culture. Thirdly, this study utilised a cross-sectional design and hence further research could consider the utilisation of a longitudinal design to allow for explorations of cause-and-effect relationships

## Articles by Students

## References

- Al-Amin, M. 2017. Transformational leadership and employee performance mediating effect of employee engagement. *North South Business Review*. 7(2), pp. 28-40.
- Antonakis, J., Avolio, B. J. and Sivasubramaniam, N. 2003. Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly*. 14(3), pp. 261-295.
- Arfara, C. and Samanta, I. 2016. The impact of emotional intelligence on improving team-working: The case of the public sector (National Centre for Public Administration and Local Government - N.C.P.A.L.G.). *Procedia – Social and Behavioral Sciences*. 230, pp. 167-175.
- Avolio, B. J. 1994. The “natural”: Some antecedents to transformational leadership. *International Journal of Public Administration*, 17(9), pp. 1559-1581.
- Avolio, B. J. and Bass, B. M. (Eds.). 2001. *Developing Potential across a Full Range of Leadership TM: Cases on Transactional and Transformational Leadership*. Psychology Press.
- Barling, J., Slater, F. and Kelloway, E. K. 2000. Transformational leadership and emotional intelligence: An exploratory study. *Leadership & Organization Development Journal*, 21(3), pp. 157-161.
- Bass, B. M. 1985. Leadership: Good, better, best. *Organizational Dynamics*, 13(3), pp. 26-40.
- Bass, B. M. 1999. Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, 8(1), pp. 9-32.
- Bezzina, F., Baldacchino D., and Cassar, V. 2020. Relating knowledge management enablers, knowledge management processes, and organizational effectiveness: The case for the Maltese pharmaceutical sector. *International Journal of Knowledge Management*, 16(4), pp. 109-124.
- Bryman, A. and Bell, E. 2011. *Business Research Methods*. 3<sup>rd</sup> ed. Oxford University Press.
- Carless, S. A., Wearing, A. J. and Mann, L. 2000. A short measure of transformational leadership. *Journal of Business and Psychology*, 14(3), pp. 389-405.
- Davies, K. A., Lane, A. M., Devonport, T. J. and Scott, J. A. 2010. Validity and reliability of a brief emotional intelligence scale (BEIS-10). *Journal of Individual Differences*, 31(4), pp. 198-208.
- De Jong, S. B. and Bruch, H. 2013. The importance of a homogeneous transformational leadership climate for organizational performance. *International Journal of Leadership Studies*, 8(1), pp. 1-18.
- Gardner, L. and Stough, C.K.K. 2002. Examining the relationship between leadership and emotional intelligence in senior level managers. *Leadership & Organization Development Journal*, 23(2), pp. 68-78.
- Gold, A. H., Malhotra A., and Segars, A. H. 2001. Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), pp. 185-214.

- Goleman, D. 2001. An EI-Based Theory of Performance. In C. Cherniss and D. Goleman (Eds.) *The Emotionally Intelligent Workplace*. Jossey-Bass, pp. 27-44.
- Hayes, A. F. 2013. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. Guildford Press.
- Herrity, J. 2021. What is transformational leadership? (and how does it lead to motivation. [Online]. Indeed. [Accessed on 8 January 2023]. Available from: <https://www.indeed.com/career-advice/career-development/transformational-leadership>.
- Hunt, J.B. and Fitzgerald, M. 2013. The relationship between emotional intelligence and transformational leadership: An investigation and review of competing claims in the literature. *American International Journal of Social Science*, 2(8), pp. 30-38.
- Kenny, D.A. 2021. Mediation. [Online] [Accessed on 8 January 2023]. Available from: <https://davidakenny.net/cm/mediate.htm>.
- Landry, L. 2019. Why emotional intelligence is important in leadership. [Online] Harvard Business School Online. [Accessed on 8 January 2023]. Available from: <https://online.hbs.edu/blog/post/emotional-intelligence-in-leadership>.
- Lee, R. E. 2018. *Psychology*. Cambridge University Press.
- Li, M., Pérez-Díaz, P.A., Mao, Y. and Petrides, K.V. 2018. A multilevel model of teachers' job performance: Understanding the effects of trait emotional intelligence, job satisfaction, and organizational trust. *Frontiers in Psychology*, 9.
- Manzoor, F., Wei, L., Nurunnabi, M., Subhan, Q.A., Shah, S.I.A. and Fallatah, S. 2019. The impact of transformational leadership on job performance and CSR as a mediator in SMEs. *Sustainability*, 11(2), pp. 1-14.
- Miao, C., Humphrey, R. H. and Qian, S. 2017. A meta-analysis of emotional intelligence effects on job satisfaction mediated by job resources, and a test of moderators. *Personality and Individual Differences*, 116, pp. 281-288.
- Mullins, L. 2007. *Management and Organizational Behaviour*. 8<sup>th</sup> ed. Prentice Hall.
- Muthén, L. K. and Muthén, B. O. 2002. How to use a Monte Carlo study to decide on sample size and determine power. *Structural Equation Modeling*, 9(4), pp. 599-620.
- Pittaway, L., Carmouche, R. and Chell, E. 1998. The way forward: Leadership research in the hospitality industry. *International Journal of Hospitality Management*, 17(4), pp. 407-426.
- Richter, A., von Thiele Schwarz, U., Lornudd, C., Lundmark, R., Mosson, R. and Hasson, H. 2015. iLead—a transformational leadership intervention to train healthcare managers' implementation leadership. *Implementation Science*, 11.
- Slaski, M. and Cartwright, S. 2003. Emotional intelligence training and its implications for stress, health and performance. *Stress and Health*, 19(4), pp. 233-239.
- Yukl, A. 2013. *Leadership in Organization*. 8<sup>th</sup> ed. Harlow.