

UNVEILING THE NEXUS: A META-ANALYTICAL EXPLORATION OF THE RELATIONSHIP BETWEEN AUTHENTIC LEADERSHIP AND ORGANIZATIONAL COMMITMENT

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ABSTRACT

In the ever-evolving realm of organizational behavior, the intricate interplay between leadership styles and employee outcomes remains a central focus of scholarly exploration. This meta-analysis delves into the nuanced relationship between "Authentic Leadership" (AL) and "Organizational Commitment" (OC) over the period from 2011 to 2021. Drawing from a comprehensive selection process encompassing 24 primary studies, our investigation, rooted in data from Mendeley, Scopus, and Google Scholar, unveils a positive association between AL and Organizational Commitment. Employing the Random Effects Model, our analysis yields a moderate correlation coefficient ($r = 0.43$), emphasizing a strategic connection. The exploration extends to publication bias analysis, indicating the reliability and generalizability of our findings. As organizations navigate the dynamics of leadership and commitment, our meta-analysis provides valuable insights for scholars and practitioners alike.

Keywords: *Authentic Leadership, Organizational Commitment, Meta-analysis, Random Effects Model, Publication Bias.*

INTRODUCTION

In the dynamic landscape of organizational behavior, the interplay between leadership styles and employee outcomes remains a focal point of scholarly inquiry. Among these leadership styles, "Authentic Leadership" has garnered substantial attention for its emphasis on transparency, self-awareness, and ethical decision-making. This meta-analysis endeavors to unravel the intricate relationship between Authentic Leadership and Organizational Commitment over the period spanning 2011 to 2021 see Figure 1. Leveraging data retrieved from Mendeley, Scopus, and Google Scholar, and adhering to stringent inclusion criteria, our investigation meticulously sifted through a plethora of studies. Following a rigorous data cleaning process, 24 primary studies emerged as the bedrock of our final analysis. The synthesis of these studies culminated in a compelling revelation — a positive relationship exists between Authentic Leadership and Organizational Commitment. This research not only contributes to the existing body of knowledge but also delves into the nuanced dimensions of leadership dynamics, offering valuable insights for practitioners and scholars alike. Furthermore, our exploration extends to the meticulous examination of publication bias, ensuring the robustness and credibility of our findings. As we embark on this meta-analytical journey, we aim to unravel the threads connecting Authentic Leadership and Organizational Commitment, providing a comprehensive understanding of their symbiotic relationship.



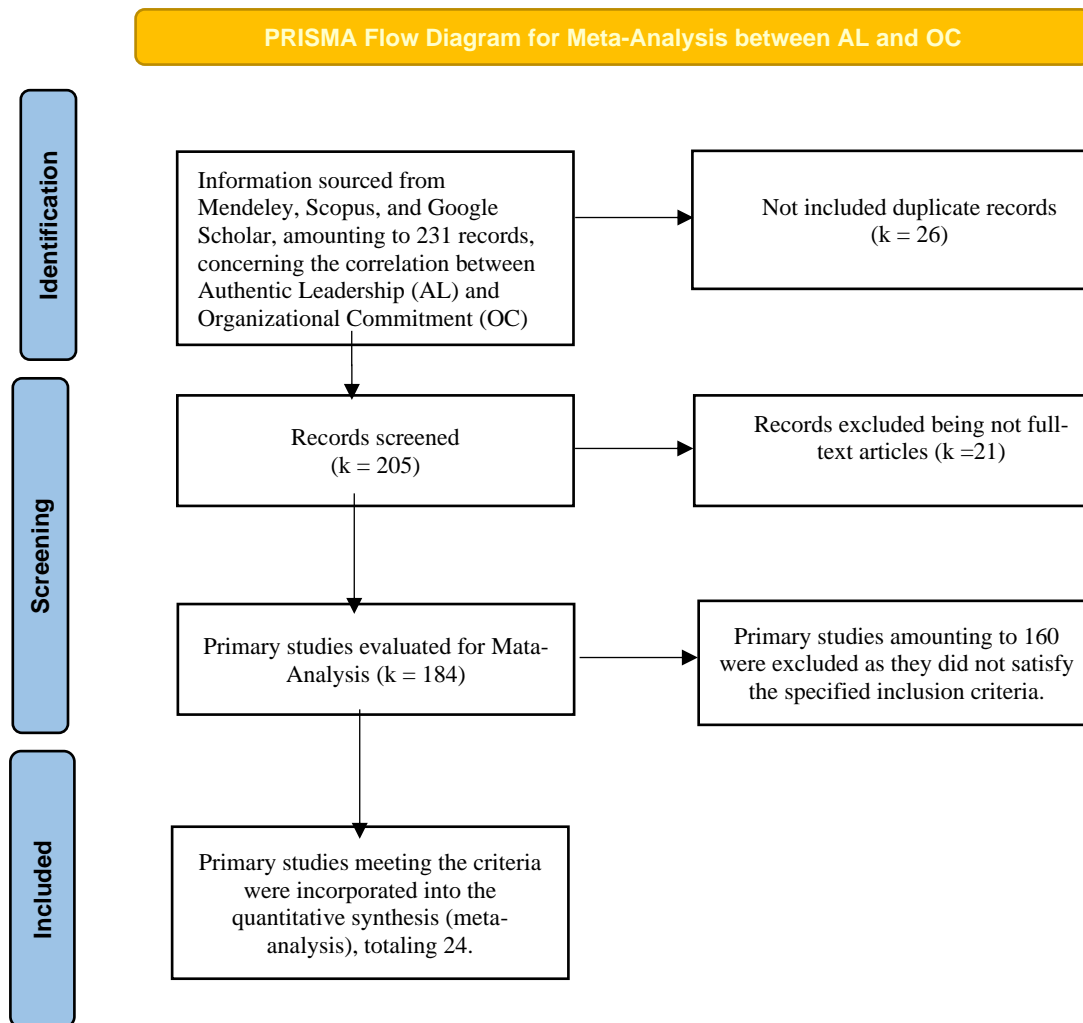
Figure 1 - Relationship between Authentic Leadership and Organizational Commitment

LITERATURE REVIEW

Navigating the Landscape through PRISMA - Embarking on a meta-analytical exploration into the intricate dynamics of Authentic Leadership (AL) and Organizational Commitment (OC), our study upholds the rigorous methodological benchmarks delineated by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework. The initial phase of our systematic search, spanning Mendeley, Scopus, and Google Scholar, cast a wide net, capturing 231 potential primary studies within the purview of our investigation.

However, the winnowing process that ensued was characterized by meticulous scrutiny, guided by predetermined inclusion criteria. Each identified study faced stringent evaluations, ensuring not only the presence of empirical insights into the AL-OC nexus but also adherence to the linguistic criterion of being available in English. Further refinement during this stage was driven by the prerequisite for studies to furnish correlation values, a pivotal metric for our analysis.

Figure 2 - PRISMA flow diagram for Meta-analysis



Note: k = Number of Studies,

Illustrating this meticulous journey is Figure 2, our PRISMA Flow Diagram. It serves as a visual narrative, capturing the sequential phases of identification, screening, and final selection of primary studies. The initial identification yielded a substantial pool, but as our inclusion criteria were meticulously applied, studies were progressively excluded for lacking empirical exploration, non-English language, or absence of correlation values. The iterative application of inclusion criteria, as delineated in Figure 2, culminated in a curated selection of 24 primary studies. These studies not only met the methodological benchmarks demanded by our investigation but also represented a deliberate and systematic effort to distill a body of literature that contributes meaningfully to our understanding of the AL-OC relationship.

Our commitment to the PRISMA guidelines ensures that the subsequent meta-analysis is underpinned by methodological transparency and precision. This comprehensive literature review, represented by Table 1, showcases detailed information extracted from all 24 qualified primary studies, offering a nuanced exploration of the relationship between AL and OC.

Table 1 – Primary Studies Included in Meta-Analysis

S. N	Predictor	Outcome	Reference of	Participants	Country	Published	<i>n</i>	<i>r</i>	Scale Used for	α of Predictor	Scale Used	α of Outcome
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o.	Variab le	Variab le	Primary Study						Predicto r Variable	tor Variab le	for Outco me Variab le	me Variab le
1.	AL	OC	Alkadash, (2020)	Teacher s	Palesti ne	Yes	23 5	0.5 8	Walumb wa et al., (2008)	0.82	Allen & Meyer , (1990)	0.75
2.	AL	OC	Abbas et al., (2020)	Employ ees	Pakist an	Yes	32 3	- 0. 02	Avolio et al., (2007)	0.87	Fry, (2003)	0.86
3.	AL	OC	Lux et al., (2019)	Employ ees	Austra lia	Yes	28 1	0.4 0	Neider & Schriesh eim, (2011)	0.96	Meyer & Allen, (1984)	0.83
4.	AL	OC	Hadian Nasab & Afshari, (2019)	Employ ees	Iran	Yes	16 3	0.6 2	Walumb wa et al., (2008)	0.76	Joung et al., (2015)	0.92
5.	AL	OC	Novaes et al., (2019)	Employ ees	Brazil	Yes	54 8	0.2 5	Neider & Schriesh eim, (2011)	0.81	John and Meyer , (1991)	0.92
6.	AL	OC	Sandhu, Ghulam Dastgeer, (2019)	Employ ees	Pakist an	Yes	23 8	0.5 8	Avolio et al., (2007)	0.74	Allen & Meyer , (1990)	0.88
7.	AL	OC	Kalay et al., (2018)	Employ ees	Israel	Yes	51 2	0.5 4	Walumb wa et al., (2008)	0.87	Meyer , Allen, & Smith, (1993)	0.75
8.	AL	OC	Rukh et al., (2018)	Employ ees	Pakist an	Yes	30 0	0.1 6	Walumb wa et al., (2008)	0.94	Nafei, (2014)	0.61
9.	AL	OC	Smith et al., (2018)	Nurses	Canad a	No	47 8	0.4 0	Avolio et al., (2007)	0.96	Meyer et al., (1993)	0.79
10.	AL	OC	Heru & Haryokus umo, (2018)	Employ ees	Indon esia	Yes	12 9	0.4 5	Walumb wa et al., (2008)	0.84	Mowd ay, Steers , & Porter , (1979)	0.79
11.	AL	OC	Ana et al., (2018)	Employ ees	Islands of	Yes	54 3	0.2 5	Walumb wa et al.,	0.92	Meyer et al.,	0.80

					Santia go and São Vicent e				(2008)		(1993)	
12.	AL	OC	Oh & Oh, (2017)	Emplo ees	South Korea	Yes	37 5	0.4 1	Neider & Schriesh eim, (2011)	0.80	Meyer et al., (1993)	0.77
13.	AL	OC	Emel et al., (2017)	Emplo ees	Turke y	Yes	14 4	0.1 5	Avolio et al., (2007)	0.88	Meyer and Allen, (1997)	0.78
14.	AL	OC	Hlongwan e & Olivier, (2017)	Emplo ees	South Africa	Yes	22 2	0.1 9	Walumb wa et al., (2008)	0.82	Meyer and Allen, (1997)	0.80
15.	AL	OC	Rego et al., (2016)	Emplo ees	Portug al	Yes	30 9	0.2 0	Walumb wa et al., (2008)	0.94	Meyer and Allen, (1997)	0.86
16.	AL	OC	Kiersch & Byrne, (2015)	Emplo ees	USA	Yes	18 7	0.6 5	Walumb wa et al., (2008)	0.96	Allen & Meyer , (1990)	0.88
17.	AL	OC	Kiersch & Byrne, (2015)	Emplo ees	USA	Yes	37	0.2 7	Walumb wa et al., (2008)	0.96	Allen & Meyer , (1990)	0.88
18.	AL	OC	Guerrero, Lapalme & Séguin, (2014)	Emplo ees	Canad a	Yes	60 6	0.2 7	Walumb wa et al., (2008)	0.94	Meyer and Allen, (1997)	0.78
19.	AL	OC	Rego et al., (2013)	Emplo ees	Portug al	Yes	50 0	0.5 9	Avolio et al., (2007)	0.96	Meyer et al., (1993)	0.89
20.	AL	OC	Leroy, Palanski, & Simons, (2012)	Emplo ees	Belgiu m	Yes	22 5	0.2 5	Walumb wa et al., (2008)	0.95	Meyer et al., (1993)	0.90
21.	AL	OC	Özkan & Ceylan, (2012)	Emplo ees	Turke y	Yes	30 4	0.5 1	Walumb wa et al., (2008)	0.91	Allen & Meyer , (1990)	0.94
22.	AL	OC	Peus et al., (2012)	Emplo ees	Germa ny	Yes	15 7	0.6 5	Walumb wa et al., (2008)	0.94	Allen & Meyer ,	0.91

											(1990)	
23.	AL	OC	Smith et al., (2012)	Employees	USA	Yes	121	0.28	Walumbwa et al., (2008)	0.93	Mowday et al., (1979)	0.86
24.	AL	OC	Abid et al., (2012)	Employees	Pakistan	Yes	210	0.48	NF	0.71	NF	0.53

Note. α = value of Cronbach's alpha; n = Sample Size; r = Value of Correlation;

METHODOLOGY

Unveiling Dynamics through the Random Effects Model - In unraveling the intricacies of the relationship between AL and OC, our methodological approach embraces the robustness of a meta-analytic framework. The cornerstone of our analysis lies in the application of the Random Effects Model, a versatile and widely acclaimed statistical technique (DerSimonian & Laird, 1986). The selection of the Random Effects Model is deliberate, stemming from its inherent capacity to account for heterogeneity across diverse primary studies. This model recognizes and accommodates variations in effect sizes that extend beyond random error, offering a more conservative and realistic estimate of the overall relationship between AL and OC (Borenstein et al., 2009).

To ensure the robustness of our meta-analysis, stringent inclusion criteria were applied during the selection of primary studies. Apart from the prerequisites mentioned in the literature review phase, studies were further evaluated for methodological soundness, including the clarity of measurement tools used for both AL and OC, and the suitability of statistical techniques employed.

The Random Effects Model assumes that the true effect size varies across studies, acknowledging the existence of both within-study and between-study variability (Higgins et al., 2003). By incorporating this variability, our analysis offers a more conservative estimate, reflective of the broader population of studies on the relationship between AL and OC. The choice of this model is not only statistically robust but also aligns with the conceptual diversity inherent in the AL-OC literature. The methodological precision maintained throughout these stages fortifies the credibility of our synthesis, ensuring that the ensuing results provide a nuanced understanding of the relationship between AL and OC.

RESULTS

Unveiling the Positive Nexus between Authentic Leadership and Organizational Commitment – In our meticulous examination of study disparities within the meta-analysis, Figure 3 reveals a nuanced narrative. The Galbraith Plot, constructed with Z-scores against Inverse Standard Error, showcases the distribution of effect sizes across 24 primary studies investigating the relationship between AL and OC.

Notably, one primary study, positioned outside the upper boundary line, is identified as an outlier according to the Galbraith Plot. Despite this categorization, we made a deliberate and justified decision to include this study in our final analysis. This choice is rooted in the recognition that, although displaying characteristics of an outlier, the study contributes valuable insights to the overarching theme of Authentic Leadership and Organizational Commitment. This inclusion underscores our commitment to a comprehensive and unbiased exploration, ensuring that diverse perspectives within the literature are considered.

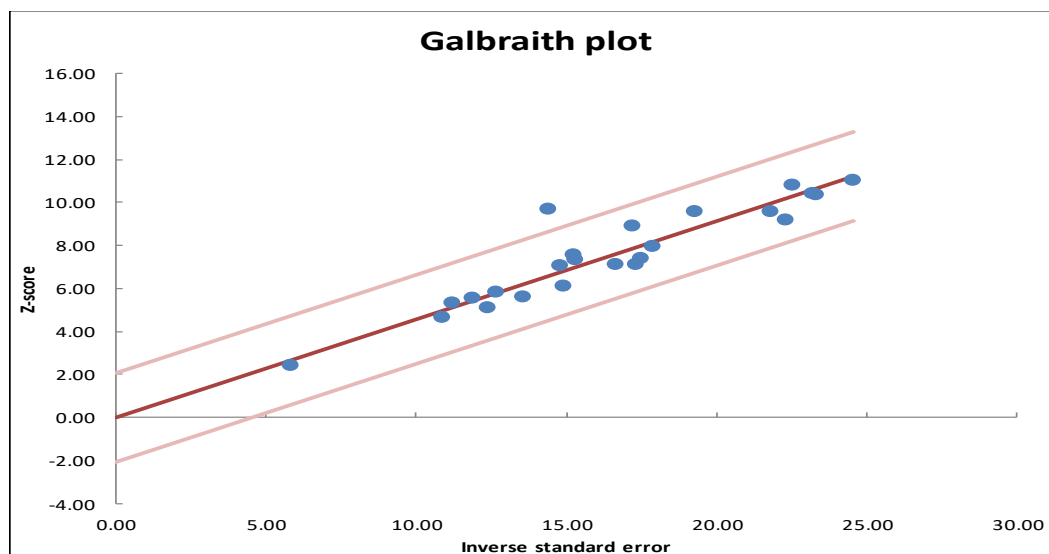


Figure 3 - Galbraith plot in studies related to Authentic Leadership and Organization Commitment, (k=24)

By incorporating this outlier study, we acknowledge and embrace the diversity of findings within the field. This approach adds an extra layer of depth and richness to our meta-analysis, strengthening the generalizability and relevance of our synthesized outcomes.

As shown in Table 2 the results of our meta-analysis, encompassing 24 primary studies with a cumulative participant pool of 7,147 individuals, sheds light on the dynamic relationship between AL and OC. The overall correlation coefficient (r) of 0.39 signifies a moderate positive association between AL and OC, indicating that as levels of Authentic Leadership increase, a concurrent rise in Organizational Commitment is observed.

Table 2 – Meta-Analysis Results

Variable	k	N	r	ρ_+	ρ_{+C}	CI _L	CI _U	PI _L	PI _U	Q	P _Q	I ²	P _{ER}	P _{BM}	TFM _{ρ+C}	IS _{TF}
						L	L	L	L			%	T	T		M
AL→OC	24	7,147	0.39	0.39	0.43	0.41	0.44	0.41	0.44	16.1	0.851	0.00	0.63	0.882	0.44	5

Refining our analysis, the correlation adjusted for artifacts introduced by sampling error and measurement error ($\rho_{+C} = 0.43$) remains robust, emphasizing the stability of the observed relationship. The confidence interval, ranging from 0.41 to 0.44, underscores the precision of our estimate and provides a narrow window for the true correlation between AL and OC.

Furthermore, our analysis incorporates Prediction Intervals (PILL: 0.41, PIUL: 0.44), extending beyond the observed studies to anticipate the correlation of a future investigation. This comprehensive view reinforces the predictive power of AL in fostering OC.

Measures of heterogeneity reveal a Q value of 16.11, a p-value (PQ) of 0.851, and an I2 of 0.00%, collectively indicating low heterogeneity across the primary studies. This low level of variation attests to the consistency in the observed relationship between AL and OC.

Publication bias, assessed through the Egger Regression Test (p-value: 0.63) and Begg & Mazumdar Test (p-value: 0.882), demonstrates the absence of bias in reporting. The Trim and Fill Method (TFM ρ +C: 0.44, ISTFM: 5, See Table 2) indicates a slight adjustment without the addition of imputed studies, reinforcing the robustness of our findings, See Figure 4. In essence, our results not only affirm the existence of a positive relationship between AL and OC but also underscore the reliability and generalizability of this association across diverse organizational contexts.

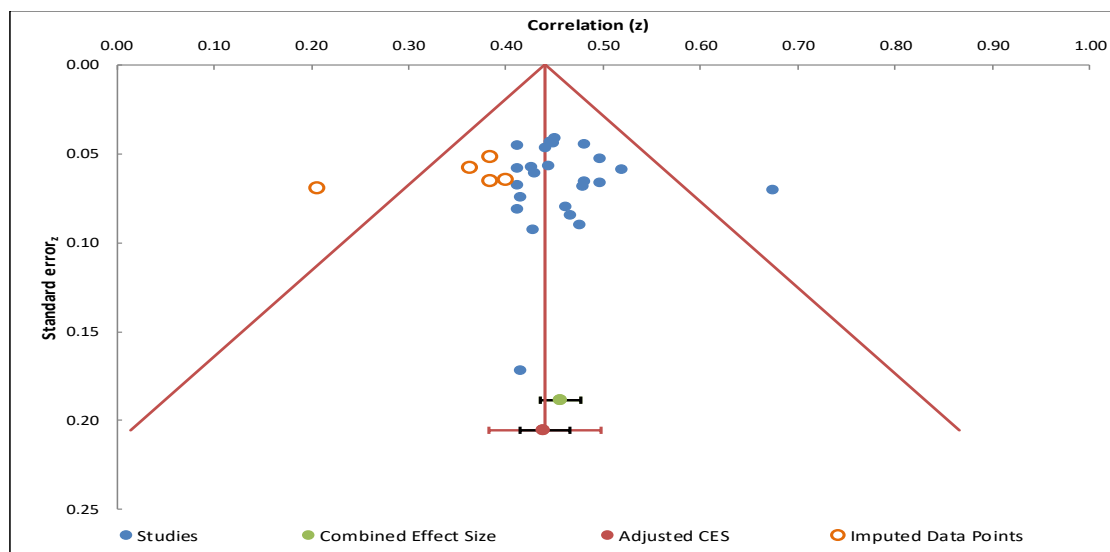


Figure 4 - Funnel plot for publication bias analysis in which trim and fill method applied in studies related to AL and OC, ($k=24$), ($IS=05$)

DISCUSSION

Deciphering the Positive Association - Our meta-analysis illuminates a significant finding—there exists a moderate positive association between AL and OC. This means that as organizations prioritize and enhance Authentic Leadership practices, a simultaneous increase in the commitment levels of their employees unfolds. This discovery underscores the pivotal role of Authentic Leadership in shaping the organizational landscape. A leadership style characterized by transparency, ethical decision-making, and genuine concern for employees correlates positively with their commitment to the organization.

As the correlation coefficient of 0.43 signifies this positive association, organizations can strategically leverage Authentic Leadership to cultivate a workforce that is not only engaged but also committed to the collective goals and values. This finding aligns with the broader discourse on effective leadership styles and their impact on organizational outcomes, emphasizing the relevance of Authentic Leadership in promoting a committed and dedicated workforce.

FUTURE RECOMMENDATIONS

Navigating New Avenues - As we chart the course for future research, it is imperative to delve into unexplored territories and refine our understanding of the Authentic Leadership-Organizational Commitment nexus. Firstly, longitudinal studies could unravel the evolution of this relationship over time, providing insights into its sustained impact. Additionally, investigating potential moderators, such as organizational culture and industry type, may yield a more nuanced understanding of the contextual influences on this association. Exploring the role of demographic factors in shaping employees' responses to AL can also be a fertile area for future inquiry.

CONCLUSION

Synthesizing Insights- In conclusion, our meta-analysis sheds light on the constructive relationship between AL and OC. The observed moderate positive association signifies the strategic importance of fostering Authentic Leadership within organizational frameworks. This correlation, substantiated by a meticulous analysis of 24 primary studies, underscores the reliability and generalizability of the findings. As organizations strive to fortify commitment and engagement among their workforce, cultivating Authentic Leadership emerges as a potent strategy. The authenticity, ethicality, and relational aspects embedded in this leadership style contribute significantly to nurturing a committed and dedicated organizational culture. This study, while contributing valuable insights, invites future endeavors to explore the multifaceted dimensions of this association, fostering continuous growth and refinement in the realm of leadership and organizational behavior.

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