

COMPARATIVE ANALYSIS OF AUTHENTIC LEADERSHIP MEASUREMENT TOOLS IN A SMALL BUSINESS CASE STUDY

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Abstract: According to international literature, managers who adopt a positive leadership style indicate a number of characteristics that are beneficial to the business organization, both in terms of individual and organizational performance. However, the conscious emergence and diffusion of these styles in the entrepreneurial sphere, as well as their research at the academic level in the Carpathian Basin, is still in its infancy. The aim of this study is to go beyond a general description of the styles and to explore the possibilities of their practical application, including their measurability. In this paper, we compare the measurement instruments (questionnaires) of authentic leadership presented in the literature using a comparative analysis method, and we also evaluate the measurement instruments under study by means of measurements carried out in a Hungarian company. The comparison will identify which measurement instruments, both from the literature and from the empirical point of view, could be applicable for a future larger sample study.

Keywords: authentic leadership, leadership measurement tools, human-centred leadership, human-centred management

JEL Classification: M12

1. Introduction

In the international literature, it is almost axiomatic that the management style of the manager can have one of the greatest, if not the greatest, effects on the performance of the business organization, the commitment, motivation and even the organizational culture of its employees (Kollár, Pierog 2024, Cserhádi, Obermayer et al. 2021, Hadházi 2016, Leroy, Palanski et al. 2012, Darvish, Rezaei 2011, Bass, Steidlmeier 2006, Luthans, Avolio 2003). This is also the case by SMEs, where most of them - without an independent HR department and without professional support - require the manager to manage the alignment of organizational goals and employee objectives as a one-man adventure (Gelencsér, Végvári et al. 2022). However, the number of international scientific researches are increasing globally (Gardner, Karam et al. 2021), the authors have found only a minimal academic journal sources on authentic and servant leadership styles in the Carpathian basis, specifically one

Hungarian article (Cserhádi, Obermayer et al. 2021) and one Serbian article (Dramićanin, Banja 2019).

Among the virtue-ethics-based, human-centred and positive leadership styles, authentic leadership is considered by several researchers to play a role as a central common denominator, emphasizing, among others, employee well-being, leadership credibility, long-term organizational sustainability and other ethical practices that benefit both the tangible and intangible well-being of the organization and its stakeholders (Leroy, Palanski et al. 2012, Gardner, Coglisier et al. 2011, Avolio, Gardner 2005)

Authentic leadership emphasizes leadership credibility and caring and attentiveness to subordinates, yet there are differences in style between the different measurement methods. Simplifying the picture is the fact that there is a common basis of interpretation in the researchers' observations and definitions, i.e. different researchers largely agree on the definition of the phenomenon and build their measurement tools on this basis. Nonetheless, the differences in methodological studies on the construction of measurement tools have generated serious, but all the more useful and developmental, debates among the scientists involved, leading the direction of measurement tool development to a higher level (Butterworth, Black et al. 2024, Levesque-Côté, Fernet et al. 2018)

In this paper, we would like to present the three most commonly used measures of this authentic leadership style available in the literature, and then compare them according to given professional criteria, mainly drawn from the literature, using the case of a small Hungarian company. It is worth noting that the measurements carried out in one enterprise were not used to examine authentic management, which would obviously require a much larger sample, but to compare the measurement tools, of which there are three in total. The scales available in the literature and the criteria that make them comparable, together with the results measured in a small enterprise, allow us to select a measurement instrument that, because of its ease of use, could be suitable for a larger sample of small and medium-sized enterprises.

2. Authentic leadership and its measurement possibilities

The scandals of the 1990s and 2000s in several large US corporations over the moral lapses of top management (Enron scandal, DotCom balloon, etc.) have intensified the need for an ethical, morally stable, responsible type of manager who takes the company and the fate of his or her subordinates seriously (Gardner, Avolio et al. 2005, Avolio, Gardner 2005, Luthans, Avolio 2003). This imperative met with the principles of positive psychology, which explores the possibilities of human well-being and meaningful, happy lives, and from this encounter emerged the positive leadership theory trends, of which authentic leadership is a kind of overarching leadership (Leroy, Palanski et al. 2012, Luthans, Avolio 2003). Authentic leadership, as defined by Walumbwa et al. (2008), is a *pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of*

leaders working with followers, fostering positive self-development. The four dimensions of authentic leadership are therefore self-awareness, relational transparency, balanced processing and internal moral perspective. The factor of self-awareness implies that a person is aware of his or her own strengths and weaknesses, core values, identity, goals and the impact of his or her behaviour on others. In relational transparency, the leader openly shares and honestly expresses his or her thoughts and feelings. In gathering and processing information balanced without influence, the leader analyses relevant incoming information objectively, including allowing his or her ideas, thoughts and beliefs about the organization and its work to be challenged by his or her colleagues. Internal moral perspective, on the other hand, means that the leader's behaviour and actions are based on clear and unambiguous moral principles and that he or she does not compromise these, either by others or in the face of organizational pressure (Butterworth, Black et al. 2024, Crawford, Dawkins et al. 2020, Walumbwa, Avolio et al. 2008)

Authentic leadership as a construct has stood the test of time, with a wealth of research demonstrating that the sound principles surrounding the style have a number of positive consequences in corporate practice, both for the organization and the individual. In terms of organizational consequences, authentic leadership is strongly correlated with subordinate job satisfaction (Azanza, Moriano et al. 2013, Jensen, Luthans 2006), subordinate satisfaction with the leader (Banks, McCauley et al. 2016, Walumbwa, Avolio et al. 2008), group and organization level (Banks, McCauley et al. 2016), and task-level performance (Levesque-Côté, Fernet et al. 2018, Leroy, Palanski et al. 2012), trust in leadership (Clapp-Smith, Vogelgesang et al. 2009), with organizational commitment (Walumbwa, Avolio et al. 2008, Jensen, Luthans 2006), and with organizational citizenship behavior (Zhang, Guo et al. 2022, Walumbwa, Avolio et al. 2008)

The positive outcome factors prove the validity of authentic leadership style and the concept (definition and factors) of the phenomenon has been clarified over nearly two decades of research, which is further strengthened by the fact that the three most commonly used measures in the literature are based on this foundation (Levesque-Côté, Fernet et al. 2018, Neider, Schriesheim 2011, Walumbwa, Avolio et al. 2008)

3. Innovation in authentic measurement tools

Although innovation in measurement tools for authentic leadership has been ongoing since 2008, criticisms of globalized generalization, reliability and consistency of measurement systems, and oversimplification still challenge researchers today (Butterworth, Black et al. 2024, Levesque-Côté, Fernet et al. 2018)

Reliability: measurement tools place a high emphasis on the opinions of subordinates, which can often be subjective, may reflect a desire to conform or may lead to hasty judgements due to the halo effect (Nicolau, Mellinas et al. 2020). Finally, existing tools place less emphasis on the links between personal values, organizational roles and external expectations, which may undermine trustworthiness.

Over-simplification: but equally questionable is the structure of the measurement instruments (questionnaires), to what extent a phenomenon related to behaviour, actions and life management can be assessed with ten to twenty questions per occasion.

Excessive positivity: research often only presents and examines authentic leadership in a positive framework, excluding or at least de-emphasizing its possible downsides and practical difficulties.

However, in addition to these criticisms, the measurement tools developed have an inestimable merit in identifying the authentic strengths and weaknesses of the driver, in addition to recognizing the phenomenon of authentic leadership. With the latest measurement tools (e.g. AL-IQ), it is no longer possible to measure not only how authentic a particular leader or leadership is, but also which factors of his or her leadership style need improvement (self-awareness, relational transparency, unbiased information processing, internal moral perspective). To the dimensions assessed in this way, specific development and training programmes can then be added, with which the leader can improve in practice in both the parts and the entirety of authentic leadership (Levesque-Côté, Fernet et al. 2018)

3.1. ALQ - Authentic Leadership Questionnaire(Walumbwa, Avolio et al. 2008)

Perhaps because of its age (2008), the Authentic Leadership Questionnaire (ALQ) is the most widely used instrument for assessing authentic leadership. Its content assesses the four main factors of the phenomenon, Self-awareness, Relational Transparency, Balanced Information Processing and Internal Moral Perspective, with a total of 16 questions and shows positive correlations with job satisfaction, trust, job satisfaction and employee engagement. The original questionnaire was administered to five samples, including public and private sectors, in three states on three continents (United States, China and Kenya). As the ALQ is the first widely used instrument to measure authentic leadership, it may be associated with a number of methodological teething problems with the construct. It has been frequently criticized for its high level of overlap between factors (conceptual overlap), which has been reported as weak discriminant validity and its versatility has been difficult to demonstrate (Levesque-Côté, Fernet et al. 2018). Furthermore, the aforementioned exclusive subordinate, subjective assessment may also create biases due to compliance constraints or hold-up effects, and part of the questionnaire is paid, which in turn raised accessibility issues (Levesque-Côté, Fernet et al. 2018, Avolio, Wernsing et al. 2018, Neider, Schriesheim 2011). In summary, the ALQ, widely used in leadership research, helps to measure the impact of authentic leadership on organizational outcomes, but its validity shortcomings have generated a need for further development of the measure.

3.2. ALI Authentic Leadership Inventory

Neider and Schriesheim sought to correct the shortcomings of the ALQ (2008) of Walumbwa et al. and created a 14-item instrument based on the same four authentic sub-dimensions, but with improved psychometric adequacy properties (content validity, adequacy), primarily for research and practical applications. Despite the

advantages of the ALI, there is still some overlap between the dimensions, and there is also delimitation issues with the full construct compared to the transformational leadership type (Neider, Schriesheim 2011). The ALI was developed with university and MBA students and validated in a wide range of policy and organizational contexts (both public and private). The ALI, like the ALQ, can serve as a good tool for assessing authentic leadership and behaviour in both research and organizational development, but, like its predecessor, needs to be developed for wider application.

3.3. AL-IQ - Authentic Leadership Integrated Questionnaire

The Autentic Leadership Integrated Questionnaire (AL-IQ) by Levesque-Côté et al. builds on previous authentic leadership measurement tools and combines and extends their dimensions, creating a more refined aspect of authentic leadership and its measurement. The AL-IQ seeks to explore the role of authenticity in leadership and organizational contexts, primarily by examining adaptation and its manifestation in specific organizational situations and circumstances, and also shows a strong positive correlation with job satisfaction, job performance and low psychological distress. One of the aims of constructing the AL-IQ was to correct for overlaps and redundancies between dimensions in the ALQ and ALI, which was achieved by using Exploratory Structural Equation Modeling (ESEM) (Asparouhov, Muthén 2009), as opposed to the other two cases where confirmatory factor analysis (CFA) was used. The resulting measure captures the four dimensions of authentic leadership (Self- awareness, Relational Transparency, Balanced Information Processing, Internal Moral Perspective) through 14 items (questions) and provides a higher level of reliability and validity in the factor structure compared to previous questionnaires. For the samples tested, the instrument was tested in English and French, confirming the invariance and reliability of the model across gender and sectors, both public (health) and private (commerce, manufacturing). The AL-IQ is newer than the other two questionnaires and its uptake is therefore limited, which is further hampered by the fact that the scale is not publicly available, only from the authors. Its validation therefore requires further application in other domains, cultures and sectors to demonstrate the generalizability and robustness of the instrument (Butterworth, Black et al. 2024, Levesque-Côté, Fernet et al. 2018). Overall, the AL-IQ has eliminated the problems of the ALQ and ALI (overlapping dimensions, redundancy) and has provided a robust measure of the strengths and weaknesses of authentic leadership, taking into account the multidimensional nature of the phenomenon.

4. Research instrument

In the comparative study, in addition to the information extracted from the literature, the individual measuring instruments were tested for a micro-enterprise in Hungary dealing with industrial electricity. In this enterprise, the owner-manager and two direct subordinates filled in questionnaires, which were scales of the three measurement tools under investigation. The questionnaires were included in a large common questionnaire, with three superimposed sections, so that the three scales

were completed by one respondent at almost the same time, ensuring consistency in the time taken to complete them. Questions were answered on a five-point Likert scale ranging from 0 (strongly disagree) to 4 (strongly agree). The authentic leadership score was obtained by taking the arithmetic mean of the scores from the responses, where the subordinate and manager averages were averaged separately at the end to give the leadership score. Although for all three sets of questions were derived from the four authentic dimensions, the scales - which are derived from the dimensions with different item numbers - do not allow for a comparison of the individual dimensions, so the summary value for the total authentic leadership from the scales is presented. This is further supported by the findings of Avolio et al. (2018), and Neider & Schriesheim that the value for the overall construct shows a more reliable result and meaning than if the individual dimensions were examined separately. Thus, for the micro- enterprise under study, the authentic leadership value measured by the ALQ instrument was 3.17, by ALI 2.79 and by AL-IQ 2.70.

Following the questionnaire survey, a round of face-to-face interviews was conducted with the research participants, one senior and two middle managers (subordinates). During the face-to-face interviews, the participants were introduced to the definition of authentic leadership available in the literature, which included a definition of the overall construct and an explanation of each of the sub-dimensions. They were then presented with the results of the questionnaire survey, which provided them with the values that emerged for each scale and the sub-dimensions within each scale. After learning about the definition and the values associated with each scale, they were asked to give their personal opinion on which scale they felt the final value for leadership in their company best fit their organization's leadership style. The personal interviews resulted in a unanimous decision, as all three, independently of each other, considered Neider & Schriesheim's Authentic Leadership Inventory scale score (2.79) to be the most appropriate for their company. All three respondents felt that this score best characterized their leadership style, as the ALQ score was considered excessively high and the AL-IQ score low. The small number of sample items was complemented by interviews with personal interviewers and made the research values more relevant, but nevertheless, we cannot ignore the concerns about the scales measuring authentic leadership, such as criticisms of reliability due to the halo effect, oversimplification or over-positivity may have been present during the completion of the questionnaire, however much we would have liked to avoid these in the information provided prior to the interview and the completion of the questionnaire.

5. Comparison of measurement tools

Table 1: Comparison of authentic leadership measurement tools

<i>Viewpoint</i>	<i>Authentic Leadership Questionnaire (ALQ)</i>	<i>Authentic Leadership Inventory (ALI)</i>	<i>Authentic Leadership Integrated Questionnaire (AL-IQ)</i>
<i>Developers</i>	Walumbwa et al. (2008)	Neider & Schriesheim (2011)	Levesque-Côté et al. (2018)
<i>Structure</i>	16 items (questions), in 4 dimensions (Self-awareness, Relational transparency, Non-influential information processing, Internal moral perspective)	14 items, similar 4 dimensions but with better psychometric reliability	14 items, dimensions refined based on ESEM to reduce redundancy and increase validity
<i>Benefits</i>	Widely validated in different contexts; a cornerstone of authentic leadership research	Improved reliability and validity; more accessible for research	Refined construct validity; reduced redundancy and cleaner dimensional structure
<i>Disadvantages</i>	Correlations between high dimensions; limited access due to copyright	Some conceptual overlap with transformational leadership; inconsistent in some contexts	Another tool that does not yet have broad cultural validation
<i>Sample types</i>	Tested in the US, Kenya, China and various private and public sectors	Initially validated on student samples, later applied in different professional contexts	Tested on French and English speaking private and public sector workers
<i>Usefulness</i>	A fundamental tool in management research and practice, although methodological criticisms limit its use	Reliable for driver development and research, but needs further refinement for generalizability	Promising tool for detailed assessment of authentic driving and various situational applications
<i>Psychometric strengths</i>	Good internal consistency but poor discriminant validity; high dimensional overlap	Stronger reliability and freedom from bias, but high correlations between dimensions persist	Improved discriminant validity and dimensional separability through ESEM
<i>Applicability</i>	Widely used in organizational and academic studies, but limited theoretical development potential	Suitable for assessing managers in specific contexts, but limited in global applications	Promising for a detailed assessment of the characteristics and situational applications of authentic driving
<i>Measurement innovations</i>	Traditional confirmatory factor analysis (CFA) was used for validation	Traditional CFA approach; further innovation needed for clarity	ESEM used to analyze more stable factor structure and dimensionality
<i>Company scores on a scale of 0-4)</i>	3,17	2,79	2,70

Comparison table of authentic driving instruments

(**Source:** created by the authors based on Walumbwa et al. (2008), Neider & Schriesheim (2011) and Levesque- Côté et al. (2018))

6. Conclusions

The aim of this study is to provide a comparative analysis of the three main measures of authentic leadership - the ALQ, ALI and AL-IQ questionnaires - with a special focus on their practical applicability in a Hungarian micro-enterprise. Although the instruments differ in their psychometric characteristics and structure, the professional community is starting from a common interpretative framework and definition of the scales, thus helping to make them comparable. During the study, the owner-manager and two subordinate middle managers of the micro-enterprise completed the questionnaire and participated in subsequent face-to-face interviews where they assessed the results of the questionnaires. The highest score for the authentic leadership of the organization was given by the ALQ (3.17), the lowest by the AL-IQ (2.70), but the participants still - unanimously - considered the ALI scale score (2.79) to be the most appropriate for their company. Although the literature suggests that the AL- IQ may be more suitable for conducting a broader survey, the present study showed that other scales could also be used for a broader survey. The study is a preparatory work for the theoretical and practical grounding of authentic leadership in the Carpathian Basin.

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