



# ANTECEDENTS, MEDIATORS, AND OUTCOMES OF AUTHENTIC LEADERSHIP IN HEALTHCARE: A SYSTEMATIC REVIEW

Bayan Alilyyani, BScN, MScN, PhD Student  
Carol Wong, RN, PhD  
Greta Cummings, PhD, RN, FCAHS, FAAN

# Overview

- Background and Significance
- Theoretical Framework, Purpose and Research Questions
- Methods
- Results
- Discussion
- Implications
- Conclusion

# Background and Significance

- Significant emphasis on leader's role in creating healthy work environment for both staff and patients and improved outcomes in healthcare organizations (Cummings et al., 2010; Shirey et al., 2010)
- Debate re: what is effective leadership in face of current challenges such as leader and staff shortages, workplace conflicts, technologic advances, economic pressures, and accelerated pace of change (Sherman & Pross, 2010)
- Authentic leadership (AL) in organizational literature in 2004 (Avolio et al.) - response to several high profile corporate ethical scandals

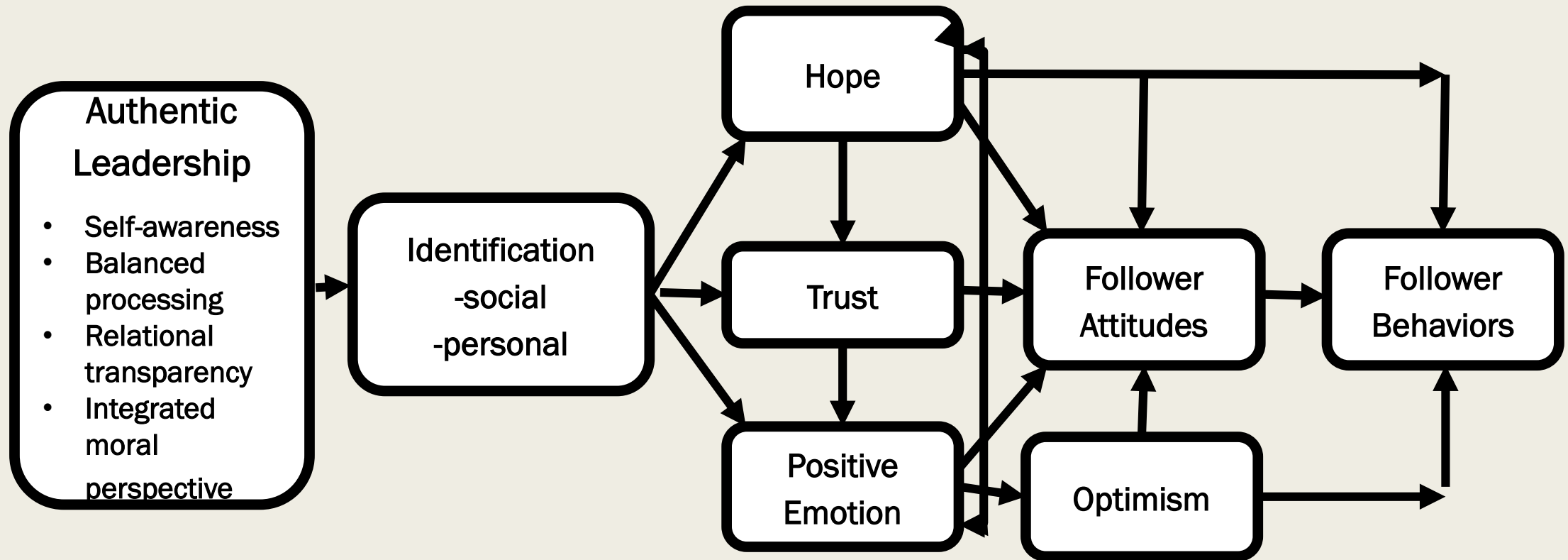
# Background and Significance

- Wong & Cummings (2009b), Shirey (2009), Wong et al. (2010) - first studies of AL in nursing and now a significant increase in studies of AL in nursing /healthcare since 2010
- Two systematic reviews showing relationships among nursing leadership practices and staff & patient outcomes (Cummings et al., 2010; Wong et al. 2013) – neither included AL studies
- Hence, need for a systematic review of the antecedents, mediators and outcomes of AL within healthcare to inform policy development, guide leadership development and intervention planning, and further direct future nursing and healthcare research

# Theoretical Framework

- Authentic leadership 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”* (Walumbwa et al, 2008, p. 94)

**Figure 1:** *Framework Linking Authentic Leadership to Follower's Attitudes and Behaviours* (Avolio et al., 2004)



# Purpose and Research Questions

- The aim of this systematic review was to examine the antecedents, mediators and outcomes associated with authentic leadership in healthcare
- Research questions:
  1. What antecedents are associated with authentic leadership in healthcare?
  2. What outcomes for healthcare staff and patients are associated with authentic leadership?
  3. What are the mediators of relationships between authentic leadership and healthcare staff and patient outcomes?

# Methods

- Used guidelines for systematic reviews from the Centre for Reviews and Dissemination (CRD, 2009) at the University of York
- **Search Strategy and Data Sources:**
  - Search was completed in July 2018
  - 11 electronic databases: ABI Inform Dateline, Academic Search Complete, Cochrane Database of Systematic Reviews (CDSR), PubMed, CINAHL, Embase, ERIC, PsycINFO, Scopus, Web of Science, and ProQuest Dissertations & Theses
  - Combination of similar search terms used to search all databases
    - *main search terms: Nurse AND Authentic Leadership AND Patient Outcome OR Healthcare Professionals AND Staff Outcome*
  - EndNote was used as the reference management system
  - Additional strategies: hand-searching reference lists of relevant articles, and current reviews, and searching specific journals



# Inclusion and Exclusion Criteria

- PICOS framework was used to guide development of the inclusion and exclusion criteria, with consideration given to populations, interventions or comparators, outcomes, and study designs (CRD, 2009)

## ***Inclusion criteria:***

- peer-reviewed research;
- English language full-text publication available;
- published between January 1, 2004 and July 31, 2018;
- measure AL in healthcare settings; and
- Studies with quantitative data and using experimental, quasi-experimental or correlational designs

## ***Exclusion criteria:***

- articles that described opinions about AL; and
- in fields other than healthcare (e.g., education), or did not have enough (i.e., not full-text) information for data extraction

## ■ **Screening and study selection:**

Two screening stages:

- Titles and abstracts screening
- Full-text screening

## ■ **Data Extraction:**

The following data were extracted from the included studies:

- author, year, journal, country, study purpose, theoretical framework or conceptual model, conceptualization or definition of authentic leadership utilized, methodological approach, setting, sampling method, sample size, description of participants, measurement instruments, reported reliability and validity, identified antecedents, mediators and outcomes of authentic leadership, analysis and statistical techniques, and significant and non-significant results

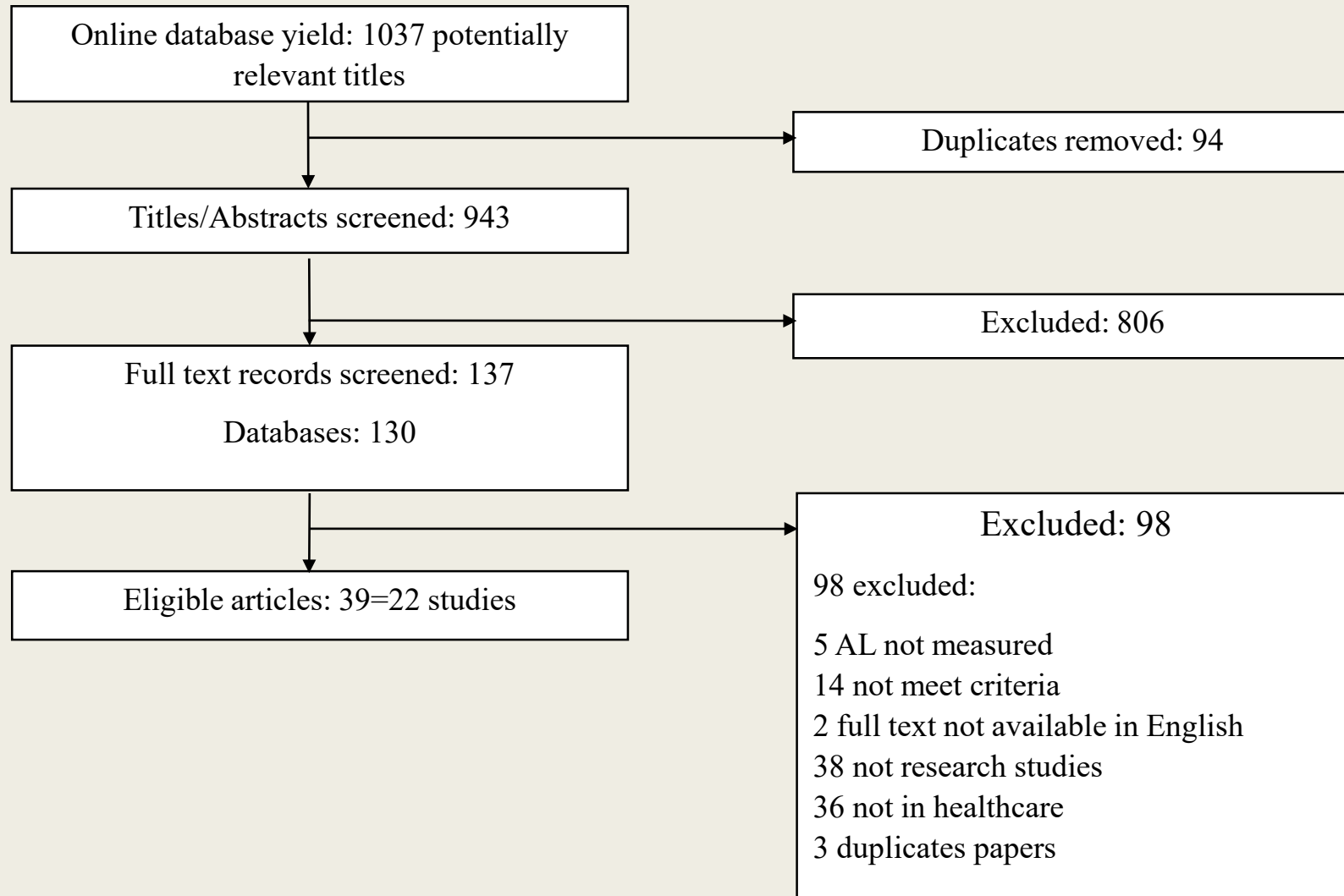
## ■ **Quality Appraisal:**

- A quality rating tool adapted from an instrument used in previously published **systematic reviews** (Cummings and Estabrooks, 2003; Cummings et al., 2008; Estabrooks et al., 2003; Wong and Cummings, 2007)
- 13 criteria were evaluated in the tool, with a total of 14 possible points (categorized as low (0–4), moderate (5–9), or strong (10–14) quality)

## ■ **Analysis:**

- Descriptive analysis – study characteristics
- Narrative analysis:
  - Content analysis of antecedents, outcomes and mediators
  - AL theory guide – compared to findings

# Results



# Summary of Quality Review

- All studies were rated as moderate (one study) or strong quality (21 studies), so none of them were excluded

# Descriptive synthesis: characteristics of included studies

## ■ General:

- All studies were published between 2009 and 2017 and more than a quarter (n=10 studies) were published in 2015–16
- The majority of studies were conducted in Canada (n=9) and the United States (n=6). Two studies were completed in each of India and South Africa and one in each of Iran, Belgium, and Turkey

## ■ Participants:

- 14 studies sampled registered nurses
- 7 were mixed groups {nurses and supervisors (3 studies), nurses and physicians in (1 study); managers, specialists, administrative personnel, academic professionals (3 studies); and chief nurse executives in (1 study)}

### ■ **Settings:**

- Studies were primarily conducted in acute care settings (n=20),
- (1 study) conducted in hospitals and nursing homes, and
- (1 study) conducted in the private healthcare industry and did not specify level of care or settings

### ■ **Study designs:**

- Studies were primarily non-experimental, correlational designs (n=19),
- time-lagged (3 studies from three original datasets reported in 6 papers), and
- one study examined authentic leadership and outcomes across patient care unit levels

### ■ **Theoretical/conceptual framework:**

- All (n=22) studies included Avolio et al.'s (2004) authentic leadership theory in addition to various other theories depending on study variables

## ■ **Measures of authentic leadership:**

- 18 studies used Avolio et al.'s (2007) Authentic Leadership Questionnaire (ALQ),
- Three study used Neider and Schriesheim's (2011) Authentic Leadership Inventory (ALI), and
- One study utilized four items from the Leadership Practices Inventory (LPI; Kouzes and Posner, 1993)

## ■ **Analysis:**

- structural equation modelling (SEM; 11 studies),
- multiple linear regression (n=8 studies), and
- path analysis (n=2 studies)



# Narrative synthesis of results

- Maintaining the same overall structure of the authentic leadership theory (Avolio et al., 2004), adaptations included new listings of mediators and outcomes based on review findings and addition of an arrow linking authentic leadership directly to outcomes (Fig. 2)
- Using content analysis procedures, findings organized into two main categories: (1) outcomes and (2) mediators of AL
- Due to heterogeneity of outcome and mediator variables only direction of effects and statistical significance and not specific effect sizes were reported
- Only 1 study examined antecedents of AL and this was structural empowerment (Haddad, 2013); this did not merit modifying the theory diagram

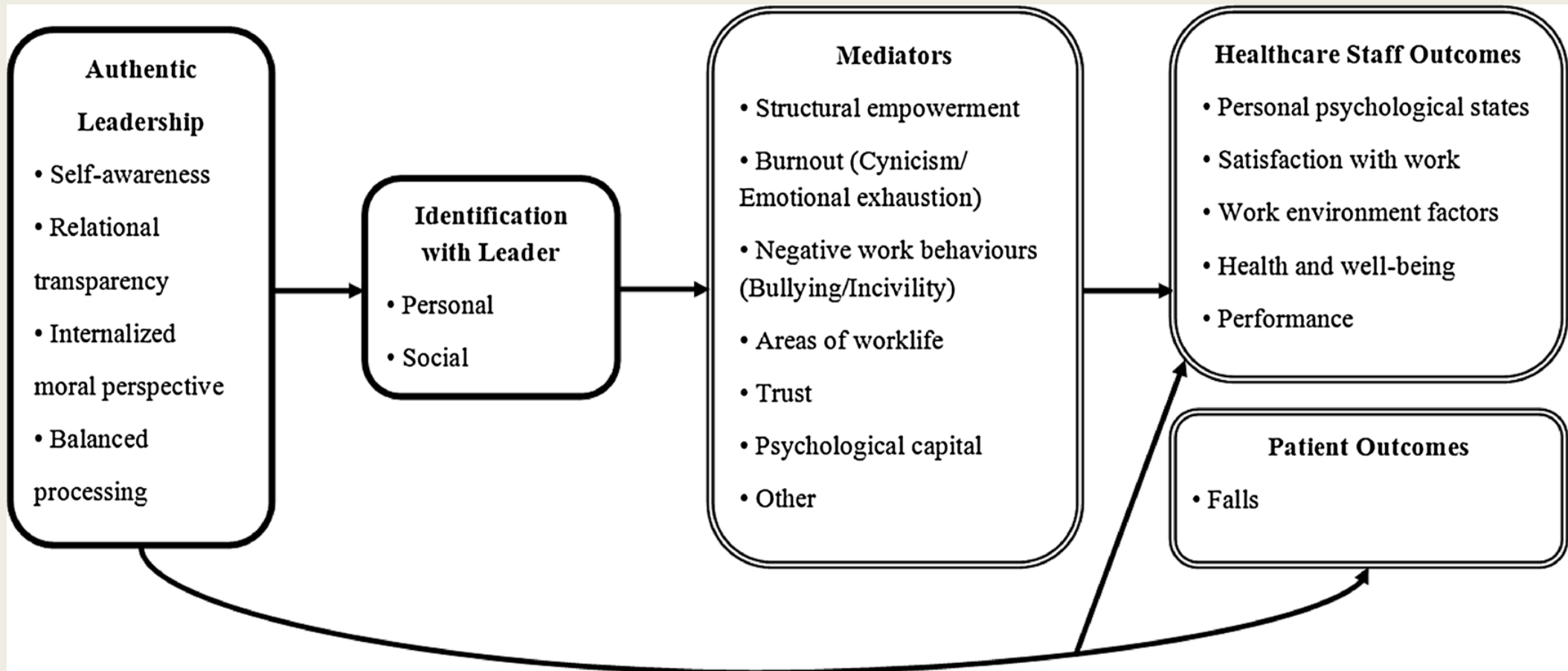


Fig. 2: Adapted authentic leadership model (Avolio et al., 2004) based on findings of systematic review of authentic leadership in healthcare. Solid lines indicate that findings from the review support demonstrated relationships. Double lined boxes indicate additions to the original theory.

# 1- Relationships between authentic leadership and outcomes

- Significant associations between authentic leadership and 43 outcomes were found and grouped into two major themes: healthcare staff outcomes and patient outcomes

## a) Healthcare staff outcomes

Outcomes were organized into five subthemes: personal psychological states, satisfaction with work, work environment factors, health and well-being, and performance

## b) Patient outcomes

## a. Healthcare staff outcomes

1. Personal psychological states	<ul style="list-style-type: none"><li>• psychological capital which includes optimism (n=4 studies)</li><li>• identification which includes personal and social/ organizational identification (n=2 studies)</li><li>• trust which includes trust in manager, organization or co-worker (n=3 studies)</li></ul>
2. Satisfaction with work	<ul style="list-style-type: none"><li>• job satisfaction (n=9 studies)</li><li>• career satisfaction (n= 1 study)</li><li>• job turnover intention (n=2 studies)</li><li>• career turnover intention ( n= 1 study)</li><li>• work engagement (n=4 studies)</li></ul>
3. Work environment factors	<ul style="list-style-type: none"><li>• structural empowerment (n=7 studies)</li><li>• Negative workplace behaviours (incivility n= 3 studies; Workplace bullying: n= 4 studies)</li><li>• workgroup relationships (n=6 studies)</li><li>• practice environment (n=4 studies)</li><li>• areas of worklife (n=4 studies)</li></ul>
4. Health and well-being	<ul style="list-style-type: none"><li>• Burnout (exhaustion n=3 studies; cynicism n=3 studies)</li><li>• Stress (work stress and stress symptoms n=1 study)</li><li>• Well-being (n=2 studies)</li></ul>
5. Performance	<ul style="list-style-type: none"><li>• job performance, knowledge sharing, creativity, learning and extra role behaviour (n=6 studies)</li></ul>

## b. Patient outcomes

1. Falls with injury	(n= 1 study)
2. Patient satisfaction with care	(n= 1 study)
3. Hospital acquired pressure ulcers	(n= 1 study)

## 2- Relationship between authentic leadership and mediators

- There were 23 mediators between authentic leadership and 35 different outcome variables in the included studies
- Most frequently identified significant mediators were:
  - Structural empowerment (9 different outcomes)
  - Burnout (4 different outcomes)
  - Negative work behaviours (3 different outcomes)
  - Areas of worklife (4 different outcomes)
  - Trust (4 different outcomes)
  - Psychological capital (3 different outcomes)

# Discussion

- Findings illustrated significant growth number of AL since 2010
- Consistency in how AL measured- two credible measures used
- Studies examined variety of staff personal, job, health and well-being, and work environment factors as mediators and/or outcomes of AL and very few examined patient outcomes
- Support for positive relationships between AL and trust, job satisfaction, structural empowerment, work engagement and work group relationships
- Findings related to negative associations between AL and negative workplace behaviours (bullying and incivility) and burnout

# Implications

## **Implications for Theory**

- Findings supported AL theory Avolio et al. (2004) suggesting that AL may contribute to positive organizations by promoting elements of healthy work environments for staff and patients
- Need for future studies of antecedents of AL and identification as mediating mechanisms

## **Implications for Leadership Practice and Policy**

- Application of AL theory and strategies to increase AL in nursing and healthcare settings
- Consider leadership development programs that use AL as a base



## **Implications for Education**

- Leadership education in undergraduate education should include some focus on AL competencies (Waite et al., 2015)
- Serve as a foundation for effective leadership by preparing students with the competencies of AL so that knowledge can be translated into the development of future healthcare leaders

# Recommendations for Future Research

- Significant gap understanding of antecedents of AL
- More studies testing relationships between AL, hope, and positive emotions as there were few studies examining this relationship
- Studies examining the relationship between AL and actual or objective patient outcomes are required
- Longitudinal, quasi-experimental or experimental designs needed to strengthen causal inferences re: AL
- Studies with more diverse samples of healthcare professionals in a greater variety of healthcare settings such as, long term care, community care, public health, mental healthcare

# Conclusion

Knowledge generated in this review provides a more comprehensive understanding of AL which can be used to educate future leaders and provide guidance for future research on AL in healthcare settings



# **QUESTIONS** **And** **Answers**

# References

- Avolio, B.J., Gardner, W.L., & Walumbwa, F.O. (2007). *Authentic Leadership Questionnaire*. Available: [www.mindgarden.com](http://www.mindgarden.com) (26.10.07).
- Avolio, B. J., Gardner, W. L., Walumbwa, F., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly*, 15, 801–823. doi: [10.1016/j.leaqua.2004.09.003](https://doi.org/10.1016/j.leaqua.2004.09.003)
- Center for Reviews and Dissemination (CRD). (2009). *Systematic reviews: CRD's guidelines for undertaking reviews in healthcare*. Laverthorpe, York: CRD, University of York.
- Critical Appraisal Skills Programme (CASP), (2010). *10 questions to help you make sense of qualitative research*. from [http://media.wix.com/ugd/dded87\\_29c5b002d99342f788c6ac670e49f274.pdf](http://media.wix.com/ugd/dded87_29c5b002d99342f788c6ac670e49f274.pdf)
- Cummings, G., MacGregor, T., Davey, M., Lee, H., Wong, C., Lo, E., & Stafford, E. (2010). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 47(3), 363–385. doi: [10.1016/j.ijnurstu.2009.08.006](https://doi.org/10.1016/j.ijnurstu.2009.08.006)
- Neider, L. L., & Schriesheim, C. A. (2011). The Authentic Leadership Inventory (ALI): development and empirical tests. *The Leadership Quarterly*, 22, 1146–1164. doi: [10.1016/j.leaqua.2011.09.008](https://doi.org/10.1016/j.leaqua.2011.09.008)
- Sherman, R., & Pross, E. (2010). Growing future nurse leaders to build and sustain healthy work environments at the unit level. *Online Journal of Issues in Nursing*, 15(1). doi: [10.3912/OJIN.Vol15No01Man01](https://doi.org/10.3912/OJIN.Vol15No01Man01)
- Shirey, M. R. (2006). Authentic leaders creating healthy work environments for nursing practice. *American Journal of Critical Care*, 15(3), 256–267.
- Shirey, M. R. (2009). Authentic leadership, organizational culture, and healthywork environments. *Critical Care Nursing Quarterly*, 32(3), 189–198. doi: [10.1097/CNQ.0b013e3181ab91db](https://doi.org/10.1097/CNQ.0b013e3181ab91db)
- Shirey, M. R., McDaniel, A. M., Ebright, P. R., Fisher, M. L., & Doebbeling, B. N. (2010). Understanding nurse manager stress and work complexity: factors that make a difference. *Journal of Nursing Administration*, 40(2), 82–91.
- Waite, R., McKinney, N., Smith-Glasgow, M. E., & Meloy, F. A. (2014). The embodiment of authentic leadership. *Journal of Professional Nursing*, 30(4), 282–291. doi: [10.1016/j.profnurs.2013.11.004](https://doi.org/10.1016/j.profnurs.2013.11.004)
- Walumbwa, F.O., Avolio, B.J., Gardner, W.L., Wernsing, T.S. & Peterson, S.J. (2008). Authentic leadership: development and validation of a theory- based measure. *Journal of Management*, 34, 89–126.
- Wong, C. A., & Cummings, G. G. (2007). The relationship between nursing leadership and patient outcomes: a systematic review. *Journal of Nursing Management*, 15(5), 508–521. doi: [10.1111/j.1365-2834.2007.00723.x](https://doi.org/10.1111/j.1365-2834.2007.00723.x)
- Wong, C.A., & Cummings, G.G. (2009a). Authentic leadership: A new theory for nursing or back to basics? *Journal of Health Organization and Management*, 23(5), 522–538. doi: [10.1108/14777260910984014](https://doi.org/10.1108/14777260910984014)
- Wong, C. A., & Cummings, G. G. (2009b). The influence of authentic leadership behaviours on trust and work outcomes of healthcare staff. *Journal of Leadership Studies*, 3(2), 6–23. doi: [10.1002/jls.20104](https://doi.org/10.1002/jls.20104)
- Wong, C., Laschinger, H. & Cummings, G. (2010). Authentic leadership and nurses' voice behaviour and perceptions of care quality. *Journal of Nursing Management*, 18, 889–900. doi: [10.1111/j.1365-2834.2010.01113.x](https://doi.org/10.1111/j.1365-2834.2010.01113.x)
- Wong, C. A., Cummings, G. G., & Ducharme, L. (2013). The relationship between nursing leadership and patient outcomes: A systematic review update. *Journal of Nursing Management*, 21(5), 709–724. doi: [10.1111/jonm.12116](https://doi.org/10.1111/jonm.12116)