

CONCEPT ANALYSIS

Transformational leadership in nursing: a concept analysis

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Abstract

Aim. To analyse the concept of transformational leadership in the nursing context.

Background. Tasked with improving patient outcomes while decreasing the cost of care provision, nurses need strategies for implementing reform in health care and one promising strategy is transformational leadership. Exploration and greater understanding of transformational leadership and the potential it holds is integral to performance improvement and patient safety.

Design. Concept analysis using Walker and Avant's (2005) concept analysis method.

Data sources. PubMed, CINAHL and PsychINFO.

Methods. This report draws on extant literature on transformational leadership, management, and nursing to effectively analyze the concept of transformational leadership in the nursing context.

Implications for nursing. This report proposes a new operational definition for transformational leadership and identifies model cases and defining attributes that are specific to the nursing context. The influence of transformational leadership on organizational culture and patient outcomes is evident. Of particular interest is the finding that transformational leadership can be defined as a set of teachable competencies. However, the mechanism by which transformational leadership influences patient outcomes remains unclear.

Conclusion. Transformational leadership in nursing has been associated with high-performing teams and improved patient care, but rarely has it been considered as a set of competencies that can be taught. Also, further research is warranted to strengthen empirical referents; this can be done by improving the operational definition, reducing ambiguity in key constructs and exploring the specific mechanisms by which transformational leadership influences healthcare outcomes to validate subscale measures.

Keywords: concept analysis, healthcare reform, leadership, management, nursing, patient safety, performance improvement, practice environment, transformational leadership

Introduction

Awareness of undesirable patient safety outcomes became widespread in the USA when the Institute of Medicine

(Kohn *et al.* 2000) reported that preventable medical error led to nearly 100,000 deaths in the USA every year; recently, James' (2013) analysis of the same data increased the estimate to nearly 400,000 preventable USA deaths annually. While patient safety data from other countries are

Why is this research or review needed?

- Unprecedented reform is essential to the survival of the healthcare system and global economy.
- Healthcare reform is dependent on leaders who think in innovative ways and have the skills, attributes and courage that enable them to implement rapid change.
- A full understanding of the concept of transformational leadership, including its meaning, usage and operational definition, is essential for preparing current and future leaders to significantly improve the healthcare system.

What are the key findings?

- The term ‘transformational leadership’ has consistent usage in the literature, yet it will benefit from an improved operational definition, as proposed in this report.
- Transformational leadership is a leadership style as well as a set of competencies that can be taught.
- Transformational leadership is not a panacea for improving patient outcomes; it should be used in conjunction with other leadership skills to optimize the performance of a workgroup.

How should the findings be used to influence policy/practice/research/education?

- This analysis creates a foundation for teaching these competencies in practice and academic settings.
- The new operational definition of transformational leadership should be tested and validated by expert opinion and empirical research.

less available, researchers indicate that this concern is a global one (Arulmani *et al.* 2007, Redwood *et al.* 2011, Bates 2009). Public and government pressure is high for transformational change in health care to improve patient safety outcomes internationally. A prominent potential solution to the patient safety conundrum that has emerged in recent years is transformational leadership (TFL), which encompasses the leadership behaviours and characteristics that positively influence organizational performance and patient safety outcomes (Mullen & Kelloway 2009). While TFL is not a universal remedy, TFL competencies can have a salient role in developing cultures of safety in the patient care environment (Kohn *et al.* 2000) and have been linked with improved performance and outcomes in many measures of healthcare performance (Howell & Avolio 1993, Wong & Cummings 2007, Mullen & Kelloway 2009). Yet, the literature has not been clear as to how and when TFL positively affects patient safety outcomes in healthcare settings. This article presents a concept analysis of TFL in the nursing

context, including a discussion and application of the results specific to nursing education, research and practice. The application of TFL as a style and competencies in the business arena is beyond the scope of this concept analysis.

Background

A concept analysis of TFL for nursing fills an important gap in knowledge on the theory and practice of nursing. According to Chinn and Kramer (2008), clarifying the meaning of a concept is integral to theory development and, subsequently, to practice and research that is guided and informed by it. In measuring healthcare performance, factors associated with leadership styles have been strongly linked to patient outcomes. Among the most useful measures of healthcare performance are nursing satisfaction, retention (Kleinman 2004, Casida & Pinto-Zipp 2008), patient satisfaction (Raup 2008) and workgroup effectiveness (Dunham-Taylor 2000). Of particular importance for healthcare performance and subsequently for patient outcomes, are the ways healthcare teams are led. A strong relationship has been established between patient safety processes and outcomes on one hand and leadership on the other (Thompson *et al.* 2005, Wong & Cummings 2007). For example, the use of patient restraints and the occurrence of immobility complications—two patient outcomes that are generally considered negative—are inversely related to the level of relationship-oriented leadership and nurse managers’ years of experience (Anderson *et al.* 2003). Much research suggests that to improve patient outcomes, we would do well to consider how leadership is understood and practiced in healthcare contexts, particularly on nursing units. Further research is warranted to test theories related to TFL and patient care outcomes. Concept analysis of TFL is a logical first step to designing research that more fully assesses the impact of TFL on patient outcomes.

One example of how TFL can be tested as a concept is offered by Kanste *et al.* (2009), whose research explicates Full-Range Leadership Theory in the context of nursing. Their findings emphasize the value of TFL in nursing in relation to staff willingness to exert extra effort, perception of leader effectiveness and leader job satisfaction. The Full-Range Leadership Theory model, with TFL in bold, is found in Figure 1.

Data sources

Databases searched for the concept analysis of TFL included PubMed, CINAHL and PsychINFO, with limits

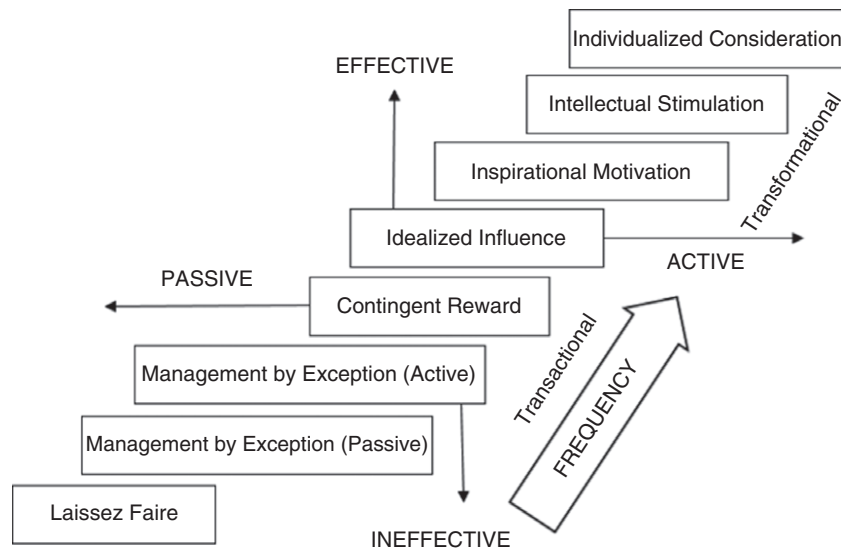


Figure 1 The Full Range Leadership Model, adapted from "Developing Potential Across a Full Range of Leadership (TM)," by B.J. Avolio and B.M. Bass, Psychology Press: New York, p. 4. Copyright 1991 by Bruce J. Avolio & Bernard M. Bass. Leaders with more frequent use of Transformational Leadership behaviors (individualized consideration, intellectual stimulation, inspirational motivation, and idealized influence) and less use of transactional leadership behaviors (contingent reward and management by exception - active) are generally considered to be more effective than those more frequently employing transactional or highly avoidant (management by exception - passive and Laissez Faire) behaviors.

set for 5 years and English language. In addition, seminal articles on concept analysis and theory development were included without date limits as they provided the foundation for the method. Keywords included concept analysis, leadership, transformational leadership, performance improvement, management and nursing. An initial search of PubMed for 'transformational leadership' resulted in 198 publications, but when combined with 'concept analysis,' the result was zero. A search of the combined terms transformational leadership, management and nursing resulted in 80 articles. These articles formed the basis of this concept analysis. Additional articles were gleaned from the articles' reference lists. All the articles reviewed were evaluated for relevance to analysing the concept of transformational leadership in the context of nursing.

Results

This section presents the results of the analysis of the steps identified in Walker and Avant's (2005) method: (a) determining the aims or purposes of the analysis; (b) identifying all uses of the concept that can be discovered; (c) determining the defining attributes; (d) identifying a model case; (e) identifying borderline, related, contrary, invented and illegitimate cases; (f) identifying antecedents and consequences associated with the concept; and (g) defining empirical referents associated with the concept.

Aims or purposes of the concept analysis

The purpose of this analysis was to clarify and explicate the conceptual meaning and common usage of the term 'transformational leadership,' to lay a foundation for the testing of TFL in nursing and patient-safety outcomes. This analysis proposes a new operational definition of TFL in support of future research endeavours.

Uses of the concept

The term 'transformational leadership' was first defined by Burns in the late 1970s (Bass 1990). Bass and Avolio (1994) are credited with having advanced the concept since that time by describing its defining features and characteristics, theory and measurement instruments (Dunham-Taylor 2000, Murphy 2005, Thompson *et al.* 2005, McGuire & Kennerly 2006, Wong & Cummings 2007, Raup 2008). An extensive review of the literature suggested that the term TFL generally referred to certain attributes that were applied as a leadership style that incorporated specific competencies.

Transformational leadership as a style

TFL falls on a continuum, with 'highly transformational' (TFL) on one end, 'highly avoidant' (laissez-faire) at the other end and 'transactional' in the middle. TFL is derived

from the Full Range Leadership Theory (Bass & Avolio 1994) and in it, followers tend to characterize leaders as being 'charismatic, visionary and loyal' (van Oyen Force 2005, p. 338). TFL is a 'high impact' (Shirey 2006, p. 282) style that typically empowers subordinates, resulting in greater job satisfaction and sense of autonomy (Kleinman 2004). Another term commonly associated with TFL is 'participative' leadership (Casida & Pinto-Zipp 2008). Other descriptors for transformational leaders include 'authentic, genuine, trustworthy, reliable and believable' (Shirey 2006, p. 280).

Transformational leadership as a set of competencies

Substantial evidence suggests that transformational leaders are not born, but developed. Key competencies can be achieved through training, education and professional development (Welford 2002, Murphy 2005, McGuire & Kennerly 2006). Thompson (2012) identified specific skills as essential for the transformational leader to master, such as learning to work with others in an empowering way, facilitating growth and learning of staff, translating evidence into practice and practice into evidence, critical reflection and communication, problem-solving and decision-making.

Defining attributes

The defining attributes and behaviours associated with TFL were identified by Bass and Avolio (1994) as the 'five I's': idealized influence (attributed), idealized influence (behavioural), inspirational motivation, intellectual stimulation and individual consideration. In another synthesis of TFL's defining attributes, Kouzes and Posner (2008) identified the transformational leader's five habitual practices: modelling the way, inspiring a shared vision, challenging the process, enabling others to act and encouraging the heart. These authors were frequently cited for their work towards describing and measuring traits, characteristics and behaviours typical of the transformational leader. Still, additional work on the measurement of transformational leadership may need to be done, given the criticism levelled towards the current definition and constructs related to transformational leadership.

Critics of TFL measures disagree with the notion that attributes of TFL were well-defined or described. One such author, Yukl (1999), stated that conceptual weaknesses keep instruments from effectively measuring or describing leadership. The most fundamental weakness identified is that of 'ambiguous constructs' (Yukl 1999). This criticism is supported by the facts that no concept analysis of TFL

has yet been published and that there does seem to be ambiguity in the defining attributes of TFL. For example, previous work has not clearly established how attributes were identified, nor is there theoretical rationale for differentiating among them.

Additional criticisms by Yukl (1999) include the contention that the processes inherent to TFL have not been sufficiently described, limiting conditions have not been adequately specified and behaviours known to be essential to certain styles of leadership have been omitted. Similar concerns regarding TFL are voiced by Hutchinson (Hutchinson & Jackson 2013) and by Eisenbeiss *et al.* (2008), who identify and substantiate four fatal flaws with TFL, going so far as to recommend abandonment of prior definitions of the concept and 'starting over' with conceptual clarification, operational definition, theory development and empirical referent design and testing. The fatal flaws inherent to the TFL concept and measures, according to Eisenbeiss (2008), include conceptual ambiguity, inadequate causal modelling to support justifiable and credible antecedents, lacking operational definition (distinct from outcomes and consequences of the leadership style) and empirical referents that are invalid due to lacking specificity and distinction from other aspects or types of leadership. According to the above-referenced critics, lack of conceptual clarity weakens the foundation for definition, theory development and operational measure design and testing.

Model case

An exemplar of TFL is a leader who demonstrates caring about his or her followers and passion about the mission of the group. The leader's followers feel warmth and security in their relationships with their leader (attributed idealized influence), as well as trust. The leader models ethical behaviours and is known for honesty and integrity (behavioural idealized influence). He or she prioritizes personal and professional development for him- or herself and followers. Decisions are value-based, which motivates and inspires followers to excel (inspirational motivation).

Consider the hypothetical case of Kathy, a model for TFL. Kathy was a Master's prepared nurse leader who had benefitted greatly from innate attributes of charisma and visionary thinking, as well as from a mentor who taught her the foundational competencies of TFL. Kathy began as the new Director of Nursing for a recently opened skilled nursing facility. At the time she started work at the facility, members of the nursing staff, having suffered a very difficult agency start-up under the direction of an autocratic leader, were confused, yet fearful to

speak of problems or request clarification. As a result, the care they delivered was disorganized and prone to error. Growth in occupancy was slow and business suffered. Kathy gathered the staff and quickly sized up the problem (emotional intelligence). She knew that, without intervention, this nursing facility would continue to provide marginal care, if it even kept its doors open. Kathy already knew what she hoped for (visionary): a place where people who needed support in everyday tasks felt cared for. She began to meet regularly with staff as a group to lay the foundation for team building (collaboration) and with individuals to get to know them and their personal interests and to develop trust (communication). Kathy used humour, passion and her warm smile and sparkling eyes to help even the most fearful and hurt see possibilities (enthusiasm). Soon, hallways were filled with laughter among staff and residents as daily tasks became organized and routine. In meetings, Kathy would align requests for project support with the personal interests of the staff, create goals to be achieved and assure that the staff had what they needed to complete the project (empowerment). Staff members new to project management were gently guided and coached to achieve goals and learn skills in the process (mentoring). Staff became confident, competent, happy providers who promoted 'their' facility at every turn. The reputation of the facility became just what Kathy had hoped for and in no time, was filled to capacity with a waiting list and became financially sound with ready reserves. Through the use of TFL, Kathy successfully transformed the organization, resulting in great benefit to the agency, staff and most importantly its stakeholders, the patients and families.

Borderline, related, contrary, invented and illegitimate cases

A concept analysis can be further developed by contrasting the concept being analysed with cases that are borderline, related, contrary, invented and/or illegitimate (Walker and Avant (2005). The literature search yielded examples for all case types, except for the invented case.

Borderline and related cases

An example of a borderline or related case is aesthetic leadership (Mannix *et al.* 2015). Like TFL, this is a 'follower-oriented' leadership model that is characterized by visionary, action-oriented leadership characteristics and behaviours. However, whereas TFL emerges from the attributes and behaviours of the leader, aesthetic leadership emerges exclusively from the perceptions of the follower. Another

related leadership model is that of congruent leadership (Mannix *et al.* 2015), which is associated with the Situational Leadership theory. Congruent leadership is like TFL in that both involve modifying leadership behaviour to accommodate and inspire the group at hand; however, congruent leadership does not drive change in followers, nor does it encourage innovation and creativity, both of which are key characteristics of TFL.

Contrary cases

In addition to noting borderline and related cases, contrasting the concept being analysed with contrary cases further explicates the concept. TFL can be contrasted with other types of leadership, such as transactional leadership and laissez-faire leadership, as well as with trait theory and pseudo-transformational leadership.

Transactional leadership is characterized by active management by exception, passive management by exception and the use of contingent rewards. Active and passive management by exception are defined as leadership behaviours that are reactive when mistakes are made or things go wrong (Kanste *et al.* 2009), in contrast with TFL's proactive, preventive approach. Contingent rewards represent the recognition offered to a follower following the achievement of a specific goal, a sort of economic exchange. Several studies (Kleinman 2004, Raup 2008, van Oyen Force 2005) show a significant relationship between contingent reward leadership behaviours and staff RN job satisfaction and retention, although some researchers (Murphy 2005) are critical of transactional leadership, positing that this style 'lacks vision for the future and endorses only changes of small magnitude that are predicated on policy and procedure rather than organizational or cultural change' (p. 130). By contrast, TFL is generally promoted in the nursing context for its encouragement of behaviours that inspire, engage and motivate followers to completely transform staid organizational processes and culture (Suliman 2009). Effective leaders may demonstrate both transformational and transactional leadership characteristics (Lindholm *et al.* 2000, Bass *et al.* 2003). Some will say that the group needs and the situation at hand should dictate the leadership style used (Kleinman 2004), while others have identified relationship between leader and follower, as well as tasks and goals established as determinants of the most effective leadership approach (Murphy 2005). TFL does not substitute for transactional leadership, but rather complements and potentiates it (Murphy 2005) by assuring that both management and leadership functions are appropriately tended.

Another contrary leadership style mentioned above, laissez-faire leadership, is characterized by behaviours that are

true to the English translation of the phrase from French: 'let it be' (Perkel 2002). This style tends to be 'hands off' at best and at its worst means having a leader who intentionally avoids engagement and decision-making. Levels of laissez-faire characteristics and behaviours are inversely related to willingness of staff to exert greater effort, perception of leader effectiveness and satisfaction with the leader (Kanste *et al.* 2009), contrasting the essential effect on followers attributed to TFL.

On a more theoretical level, TFL also stands in contrast with trait theory. While TFL aligns with Full Range and Situational Leadership theories, discussed above, TFL does not comport with trait theory's claim that leaders possess inherent traits enabling them to assume leadership roles; trait theory further posits that, based on the identification of certain traits, personalities and characteristics, one can predict whether a person will be a leader (Cummings *et al.* 2008). While trait theory holds that leaders are born, not made, substantial evidence exists to support TFL as a competency that can be taught (Gowen *et al.* 2009, Duygulu & Kublay 2011).

Illegitimate cases

Having identified borderline, related and contrary cases associated with the concept of TFL, it is important to recognize illegitimate exemplars of TFL. All transformational leaders have in common the power to influence people, but they do not universally possess good intentions (Hutchinson & Jackson 2013, Tourish 2013). Cult leaders like Charles Manson or Jim Jones are illegitimate cases of TFL. Differentiating illegitimate cases of TFL is important for guarding against inadvertent development of leaders who do not prioritize ethical intention and good faith efforts in their leadership practice.

Another example of an illegitimate case of TFL is that of Pseudo-Transformational Leadership. First identified by Bass and Steidlmeier (1999), this leadership style is characterized by many of the same traits as TFL, but the leader's intentions emerge from self-interest and unethical motives. The capacity to influence others, when undergirded by malevolence, becomes manipulative rather than inspirational. The magnitude of unethical intent and severity of impact on followers serve to define Pseudo-Transformational Leadership as an illegitimate example of TFL.

While substantial evidence demonstrates the strengths and positive influences of TFL on the work environment, culture, performance and outcomes, many authors are quick to caution that one should not conclude that TFL is a panacea. Welford (2002) emphasizes that despite the value of TFL as a style, no one leadership style is effective

in all situations. This is consistent with the view of Fiedler, who for this reason developed the Situational Leadership theory (Murphy 2005), described above. Lindholm *et al.* (2000) also notes that the most effective leadership profile is one that can be adapted to different situations, as does Jones (2006).

Antecedents and consequences

Despite the extensive research related to TFL, few antecedents have yet been proposed: leader identity (Johnson *et al.* 2012), emotional intelligence and social skills (Tyczkowski *et al.* 2015). However, the competencies considered essential to TFL could be construed as antecedents, including communication, collaboration, coaching skills and mentoring skills (O'Brien *et al.* 2008, Clavelle 2012, Buckner *et al.* 2014). Most research related to antecedents suggests that further study is warranted. Much more attention has been paid to the consequences or outcomes of TFL.

In terms of consequences, TFL is known to have significant effects on followers, organizations and leaders themselves. Most notably for followers, TFL has the effect of inspiring and motivating, leading them to grow and develop personally and professionally (Bamford-Wade & Moss 2010). These followers tend to feel more valued (McGuire & Kennerly 2006) and their performance is enhanced as a result of increased self-efficacy and engagement (Salanova *et al.* 2011). This effect likely results from a greater investment in coaching and mentoring on the part of the transformational leader (Koerner & Bunkers 1992).

TFL followers and the leaders themselves enjoy multiple benefits while the organization reaps tremendous outcomes in loyalty and commitment from these followers. Increased loyalty and commitment to the organization, along with improved job satisfaction and morale, all result in significant reductions in turnover and greater job performance (Leach 2005), giving the organization an overall competitive advantage. TFL predicts performance even when personality characteristic variables are controlled (Bass *et al.* 2003).

Empirical referents

Several empirical referents have been proposed for measuring TFL. The most common instrument for measuring TFL is the Multifactor Leadership Questionnaire (MLQ), developed by Bass and Avolio (2004). This 45-item, self-report questionnaire measures a range of leadership behaviours. The 12 subscales of the MLQ measure each of the defining attributes of leadership, as well as attributes categorized as

transactional and laissez-faire, in addition to general attributes of extra effort, effectiveness and satisfaction. The MLQ has been used extensively in health care and other industries, despite ongoing challenges to its factor structure; studies have repeatedly failed to replicate the original factor structure (Edwards *et al.* 2012). Less frequently used measures for TFL include the Leadership Practices Inventory (Kouzes & Posner 2008) and the Global Transformational Leadership Scale (Carless *et al.* 2000). All of the scales in use have been criticized for the ambiguity of their constructs and the high correlations among subscales (Hutchinson & Jackson 2013). In nursing leadership studies, the use of the MLQ and LPI scales is allegedly suspect due to frequent methodological design weaknesses (Hutchinson & Jackson 2013).

Summary of results

This concept analysis has reviewed the established definition of TFL, in addition to the common use of the term in business and social/psychological science theory. Several limitations and criticisms of the common usage of TFL have emerged, primarily due to conceptual ambiguity and theoretical weaknesses. The concept has neither a strong operational definition, nor clearly identified underlying constructs. Further definition of TFL and concept clarification will benefit theory development and future research.

Discussion

The literature search for this concept analysis revealed an abundance of literature related to TFL in the nursing context; many research studies document and explore the outcomes and importance of this leadership style. 'Transformational leadership' is a term that is frequently used in nursing research and publications and is increasingly used in verbal communication in the health care and business setting. By and large, researchers have accepted and put to use the work of Bass and Avolio (Bass 1990) that specifies, differentiates and defines the attributes, characteristics and behaviours associated with TFL. Researchers consistently express that further research is needed to more fully explicate *how* TFL influences leaders, followers and outcomes.

Limitations

One of the challenges to a comprehensive concept analysis, especially in the healthcare context, is the field's ever-changing landscape. The healthcare environment is facing such rapid change that there are ongoing shifts in meaning

and usage of existing verbiage, as new constructs and language are created to describe new structures and processes.

Theoretical implications

An important theoretical implication that emerges from this concept analysis is the questionable validity of the commonly used operational definition of the term 'transformational leadership.' TFL is defined by Bass and Avolio (2004) as 'a type of leadership style that leads to positive changes in those who follow.' Leaders who use this style 'are generally energetic, enthusiastic and passionate [as well as] ... concerned and involved in the process [and] focused on helping every member of the group succeed as well' (p. 25). A problem with this definition is that it defines Transformational Leadership on the basis of what it does, rather than what it is. For a full understanding of the meaning of the term, it is essential to develop a definition based on the traits and characteristics of the leader, rather than based on the impact on followers.

Future research

Ample opportunities exist to develop and test leadership models. This concept analysis creates a foundation for future research by proposing a new definition of TFL, one that is distinct from the antecedents and consequences of the concept. The proposed definition is as follows:

Transformational leadership is an integrative style of leadership as well as a set of competencies. The Transformational Leadership style is identified by an enthusiastic, emotionally mature, visionary and courageous lifelong learner who inspires and motivates by empowering and developing followers. Competencies essential to the transformational leader include emotional intelligence, communication, collaboration, coaching and mentoring.

This definition identifies the traits, antecedents and the consequences of the two faces of TFL: a set of competencies and a leadership style.

Implications for nursing practice

This concept analysis bolsters nursing theory, research, education and practice at a time when nursing leaders are positioned to become more prominent players in healthcare reform and policy development. A growing responsibility for expansion of practice requires strong and effective leadership skills and an understanding of transformational leadership will benefit this skill development and practice.

Conclusion

The process of constructing conceptual meaning is crucial for theory development and testing (Chinn & Kramer 2008). No concept analysis of TFL has yet been published in the context of nursing, despite the prevalence in usage of the term TFL, its prominence in conversations about organizational influence and the lack of consensus regarding definition and group or individual-level effects of TFL (Wang & Howell 2010). The present report addresses this gap in the literature, contributing to the foundation of nursing knowledge as it relates to leadership theory, education, research and practice, by proposing an improved operational definition and delineating essential competencies for TFL.

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Conflict of interest

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Author contributions

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- substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data;
- drafting the article or revising it critically for important intellectual content.

References

- Anderson R.A., Issel L.M. & McDaniel R.R. (2003) Nursing homes as complex adaptive systems: Relationship between management practice and resident outcomes. *Nursing Research* 52(1), 12–21.
- Arulmani R., Rajendran S.D. & Suresh B. (2007) Adverse drug reaction monitoring in a secondary care hospital in South India. *British Journal of Clinical Pharmacology* 65(2), 210–216.
- Bamford-Wade A. & Moss C. (2010) Transformational leadership and shared governance: an action study. *Journal of Nursing Management* 18(7), 815–821.
- Bass B.M. (1990) *Bass & Stodgill's Handbook of Leadership: Theory, Research and Managerial Applications*. The Free Press, New York, NY.
- Bass B. & Avolio B.J. (1994) *Improving Organizational Effectiveness through Transformational Leadership*. SAGE, Thousand Oaks, CA.
- Bass B. & Steidlmeier P. (1999) Ethics character and authentic transformational leadership behaviour. *Leadership Quarterly* 10, 181–217.
- Bass B.M. & Avolio B.J. (2004) *Multifactor Leadership Questionnaire-5X Short Form*. Mind Garden, Redwood City, CA.
- Bass B.M., Avolio B.J., Jung D.I. & Berson Y. (2003) Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology* 88(2), 207–218.
- Bates D. (2009) Global priorities for patient safety research. *BMJ: British Medical Journal* 338(7705), 1242–1244. Retrieved from <http://www.jstor.org/stable/41552057>.
- Buckner E.B., Anderson D.J., Garzon N., Hafsteinsdottir T.B., Lai C.K. & Roshan R. (2014) Perspectives on global nursing leadership: international experiences from the field. *International Nursing Review* 61(4), 463–471.
- Carless S., Wearing A. & Mann L. (2000) A short measure of transformational leadership. *Journal of Business and Psychology* 14(3), 389–405.
- Casida J. & Pinto-Zipp G. (2008) Leadership-organizational culture relationship in nursing units of acute care hospitals. *Nursing Economics* 26(1), 7–15.
- Chinn P.L. & Kramer M.K. (2008) *Integrated Theory and Knowledge Development in Nursing*. Mosby, St. Louis, MO.
- Clavelle J.T. (2012) Transformational leadership: visibility, accessibility, and communication. *Journal of Nursing Administration* 42(7–8), 345–346.
- Cummings G., Lee H., Macgregor T., Davey M., Wong C., Paul L. & Stafford E. (2008) Factors contributing to nursing leadership: a systematic review. *Journal of Health Services Research and Policy* 13(4), 240–248.
- Dunham-Taylor J. (2000) Nurse executive transformational leadership found in participative organizations. *Journal of Nursing Administration* 30, 241–250.
- Duygulu S. & Kublay G. (2011) Transformational leadership training programme for charge nurses. *Journal of Advanced Nursing* 67(3), 633–642.
- Edwards G., Schyns B., Gill R. & Higgs M. (2012) The MLQ factor structure in a UK context. *Leadership and Organization Development Journal* 33(4), 369–382.
- Eisenbeiss S.A., van Knippenberg D. & Boerner S. (2008) Transformational leadership and team innovation: integrating team climate principles. *Journal of Applied Psychology* 93(6), 1438–1446.
- Gowen C.R. 3rd, Henagan S.C. & McFadden K.L. (2009) Knowledge management as a mediator for the efficacy of transformational leadership and quality management initiatives in U.S. health care. *Health Care Management Review* 34(2), 129–140.
- Howell J. & Avolio B. (1993) Transformational leadership, transactional leadership, locus of control, and support for innovation: key predictors of consolidated business-unit performance. *Journal of Applied Psychology* 78(6), 891–902.
- Hutchinson M. & Jackson D. (2013) Transformational leadership in nursing: towards a more critical interpretation. *Nursing Inquiry* 20(1), 11–22.
- James J.T. (2013) A new, evidence-based estimate of patient harms associated with hospital care. *Journal of Patient Safety* 9(3), 122–128.

- Johnson K., Johnson C., Nicholson D., Potts C.S., Raiford H. & Shelton A. (2012) Make an impact with transformational leadership and shared governance. *Nursing Management* 43(10), 12–14, 17.
- Jones K. (2006) Transformational leadership for transformational safety. *Occupational Health and Safety* 75(6), 82, 84–82 85.
- Kanste O., Kaariainen M. & Kyngas H. (2009) Statistical testing of the full-range leadership theory in nursing. *Scandinavian Journal of Caring Sciences* 23(4), 775–782.
- Kleinman C. (2004) The relationship between managerial leadership behaviors and staff nurse retention. *Hospital Topics* 82(4), 2–9.
- Koerner J.G. & Bunkers S.S. (1992) Transformational leadership: the power of symbol. *Nursing Administration Quarterly* 17(1), 1–9.
- Kohn L.T., Corrigan J. & Donaldson M.S. (2000) *To Err is Human: Building A Safer Health System*. National Academy Press, Washington, DC.
- Kouzes J.M. & Posner B.Z. (2008) *The Leadership Challenge*. Jossey-Bass, Chichester.
- Leach L.S. (2005) Nurse executive transformational leadership and organizational commitment. *Journal of Nursing Administration* 35(5), 228–237.
- Lindholm M., Sivberg B. & Uden G. (2000) Leading styles amongst nursing managers in changing organisations. *Journal of Nursing Management* 8, 327–335.
- Mannix J., Wilkes L. & Daly J. (2015) Aesthetic leadership: its place in the clinical nursing world. *Issues in Mental Health Nursing* 36(5), 357–361.
- McGuire E. & Kennerly S. (2006) Nurse managers as transformational and transactional leaders. *Nursing Economics* 24(4), 179–185.
- Mullen J.E. & Kelloway E.K. (2009) Safety leadership: a longitudinal study of the effects of transformational leadership on safety outcomes. *Journal of Occupational and Organizational Psychology* 82, 253–272.
- Murphy L. (2005) Transformational leadership: a cascading chain reaction. *Journal of Nursing Management* 13(2), 128–136.
- O'Brien J.L., Martin D.R., Heyworth J. & Meyer N.R. (2008) Negotiating transformational leadership: a key to effective collaboration. *Nursing and Health Sciences* 10(2), 137–143.
- van Oyen Force M. (2005) The relationship between effective nurse managers and nursing retention. *Journal of Nursing Administration* 37(7/8), 336–341.
- Perkel L.K. (2002) Nurse executives' values and leadership behaviors. Conflict or coexistence? *Nursing Leadership Forum* 6 (4), 100–107.
- Raup G.H. (2008) The impact of ED nurse manager leadership style on staff nurse turnover and patient satisfaction in academic health center hospitals. *Journal of Emergency Nursing* 34(5), 403–409.
- Redwood S., Rajakumar A., Hodson J. & Coleman J. (2011) Does the implementation of an electronic prescribing system create unintended medication errors? A study of the sociotechnical context through the analysis of reported medication incidents. *BMC Medical Informatics and Decision Making* 11(1), 1–29.
- Salanova M., Lorente L., Chambel M.J. & Martinez I.M. (2011) Linking transformational leadership to nurses' extra-role performance: the mediating role of self-efficacy and work engagement. *Journal of Advanced Nursing* 67(10), 2256–2266.
- Shirey M. (2006) Building authentic leadership and enhancing entrepreneurial performance. *Clinical Nurse Specialist* 20(6), 280–282.
- Suliman W.A. (2009) Leadership styles of nurse managers in a multinational environment. *Nursing Administration Quarterly* 33 (4), 301–309.
- Thompson J. (2012) Transformational leadership can improve workforce competencies. *Nursing Management* 18(10), 21–24.
- Thompson P.A., Navarra M.B. & Antonson N. (2005) Patient safety: the four domains of nursing leadership. *Nursing Economics* 23(6), 331–333.
- Tourish D. (2013) *The Dark Side of Transformational Leadership: A Critical Perspective*. New York: Routledge.
- Tyczkowski B., Vandenhouten C., Reilly J., Bansal G., Kubsch S.M. & Jakkola R. (2015) Emotional intelligence (EI) and nursing leadership styles among nurse managers. *Nursing Administration Quarterly* 39(2), 172–180.
- Walker L.O. & Avant K.C. (2005) *The Strategies of Theory Construction in Nursing*. Pearson-Prentice Hall, Upper Saddle River, NJ.
- Wang X.H. & Howell J.M. (2010) Exploring the dual-level effects of transformational leadership on followers. *Journal of Applied Psychology* 95(6), 1134–1144.
- Welford C. (2002) Transformational leadership in nursing: matching theory to practice. *Nursing Management (Harrow)* 9 (4), 7–11.
- Wong C. & Cummings G. (2007) The relationship between nursing leadership and patient outcomes: a systematic review. *Journal of Nursing Management* 15(5), 508–521.
- Yukl G. (1999) An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *Leadership Quarterly* 10(2), 285–305.

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