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LAWRENCE S. BLOOMBERG
FACULTY OF NURSING
UNIVERSITY OF TORONTO

Measuring nurse leadership with the Leadership Practices Inventory

What is this research about?

The health care system in Ontario faces numerous challenges. These include limited economic resources, nursing shortages and demands for improved quality of care. To meet these challenges, healthcare environments need transformational leadership.

Transformational leadership promotes major organizational change and positive organizational outcomes.

The Leadership Practices Inventory (LPI) is a leadership behavior measurement instrument developed by Kouzes and Posner (1995) that has been used across different organizations. This instrument has recently been used in nursing research. The LPI measures five leadership practices consistent with transformational leadership style:

- Challenging the process
- Inspiring a shared vision
- Enabling others to act
- Modeling the way
- Encouraging the heart

Existing studies have not reported on LPI psychometric properties to assess nurse leadership.

The purpose of this study is to investigate psychometric properties of the LPI when used to measure leadership practices of nurses working in healthcare organizations.

What you need to know:

A three-factor LPI solution has psychometric properties that are as strong as those found in the original five-factor LPI solution. This study recommends the use of a three-factor solution because of the strong psychometric properties, lighter respondent burden and reduced research costs when compared with the original five-factor solution.

What did the researchers do?

A five day leadership development intervention program took place in Toronto in August 2001. Data were collected from 67 nurse leaders who completed evaluation surveys. Survey participants were invited to complete three instruments: the LPI-self, the Maslach Burnout Inventory (MBI) and the Organizational Environment Assessment (OEA). In addition, each participant had an average of five peer



Research

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observers complete the LPI and OEA instruments. Statistical analysis focused on testing dimensionality, reliability, and construct validity for the LPI.

What did the researchers find?

The researchers found a three-factor solution instead of the original five-factors previously established by Kouzes and Posner. The three new factors include:

- Cognitive practices
- Behavioural practices
- Supportive practices.

This three-factor solution demonstrated adequate psychometric properties, which were usually stronger than those for the five-factor solution using the same data. More variance was explained with the three-factor solution than had previously been explained by the original five-factor solution.

The differences in factor analysis findings may be explained by the difference between samples used. In this study, the sample consisted of almost entirely female participants who all worked in healthcare settings compared to the large heterogeneous sample collected by Kouzes and Posner.

Research instruments should be succinct to minimize both respondent burden and research costs. Furthermore, if leadership practices can be measured effectively and accurately by three factors rather than five, regression models using three factors will have more power than those using five factors.

The LPI has a dual role as an educational and research instrument. However, research and educational needs are not always similar. When the LPI is used for educational purposes, more LPI factors may be desirable to assist learners in effective leadership practices and behaviours. This tension between educational and research needs should be resolved.

How can you use this research?

Further research is needed to gather evidence of LPI psychometric properties in the nursing context. A three-factor LPI could be employed in healthcare settings to assess leadership among nurse leaders and identify opportunities to enhance transformational leadership.

Original Article:

To learn more about this study, we invite you to read the original research article:

Tourangeau, A.E., McGilton, K. (2004). Measuring leadership practices of nurses using the leadership practices inventory. *Nursing Research*, 53(3), 182 – 189

About the Researcher

Ann Tourangeau is an Associate Professor in the Faculty of Nursing at the University of Toronto, and an adjunct scientist at ICES. tourangeau.research@utoronto.ca

Keywords

Factor analysis, leadership, leadership practices inventory, LPI, measurement, psychometric properties
