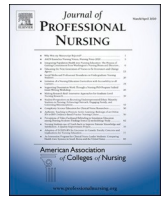


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Perceptions of preceptors' authentic leadership and final year nursing students' self-efficacy, job satisfaction, and job performance

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ABSTRACT

Background: Preceptors are integral to the transition process of student nurses to licensed nurses. Preceptors are leaders who could utilize authentic leadership to help foster self-awareness and positive relationships and build capacity with student nurses.

Purpose: Investigating the relationship between perceived preceptor authentic leadership and final year nursing students' self-efficacy, job satisfaction and performance.

Methods: This correlational study used data collected from 94 pre-licensure final semester baccalaureate and licensed practical nursing students from three different schools about preceptors' authentic leadership, self-efficacy, job satisfaction and performance. Mediated multiple regression analysis was used to examine the association between perceived preceptors' authentic leadership, self-efficacy, job satisfaction and performance.

Results: Preceptors were perceived to demonstrate authentic leadership ($M = 3.21, SD = 0.68$). Students' self-efficacy increased post preceptorship ($t(93) = 3.96, p < .001$), and authentic leadership was associated with self-efficacy ($r = 0.46, p < .001$) and job satisfaction ($r = 0.49, p < .001$). Self-efficacy mediated the relationship between job performance and authentic leadership.

Conclusions: Authentic leadership has positive implications for preceptorship and nursing students' self-efficacy, job satisfaction and performance, which could enhance nurse retention.

Introduction

Globally the healthcare climate has become very tense, calling for wise leadership to navigate a daily increase in demand for human resources to provide care to the world's citizens. With an increased demand for nurses, student nurses must be effectively trained to transition into a complex healthcare environment with the stress of responding to a global pandemic (Lowe, 2020). Preceptors are integral to the transition of pre-licensure student nurses into the nursing profession (Chen et al., 2021). The nursing literature identifies preceptors as leaders who help socialize novice nurses and evaluate students' competence and ability to practice safely (Duteau, 2012). In this study, it is assumed that preceptors are leaders in clinical nursing education.

Nursing students' transition into the role of competent nurse commences before graduation, and they need to effectively demonstrate knowledge, skills, behavior, and attitudes congruent with nursing (Duchscher, 2009). The preceptor facilitates learning through hands-on experience to increase students' competence, thereby enhancing self-

efficacy beliefs (Kaihlainen et al., 2018). Since preceptors are leading the transition of nursing students into the profession of nursing, this study sought to test a model linking preceptors' authentic leadership with students' self-efficacy, job satisfaction, and performance. Evidence from this study will support the applicability of authentic leadership to nursing preceptorship in the nursing student population, thus, informing nursing leadership, practice, and education. This article shares the quantitative findings from a mixed methods study completed for a doctoral dissertation with the purpose of investigating the relationship between perceived preceptor authentic leadership and final year nursing students' self-efficacy, job satisfaction, and job performance.

Literature review

Preceptorship is a formal relationship between an experienced licensed nurse (preceptor) and a student nurse within a set timeframe that provides experiences intended to promote growth and competence to allow for a smooth transition from student to a licensed nurse

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(Kaihlainen et al., 2018). The preceptorship experience occurs in the final semester of the nursing program, ideally with one preceptor. Preceptors are healthcare organization employees who work in collaboration with the post-secondary institution to guide and support students, provide feedback, enhance learning experiences and performance, and connect theory to practice facilitating socialization to the realities of nursing (Melrose et al., 2021). Preceptors are recognized as leaders due to the mentoring and supervision requirement of licensed nurses by various regulators (College of Registered Nurses of Alberta [CRNA], 2013). In this study, 'preceptorship' refers to the relationship between a licensed nurse and a student nurse in the final clinical practicum of their baccalaureate or licensed practical nursing program.

In Canada, where the current study was done, licensed practical nurses (LPN) complete a two-year diploma program (College of Licensed Practical Nurses of Alberta [CLPNA], 2018) and registered nurses (RNs) a four-year Baccalaureate program (CRNA, 2019). Both programs consist of theory and clinical components that culminate with preceptorship. Preceptorship is supervised and directed by a preceptor for two to three months. Learning consolidation in preceptorship allows students to demonstrate meeting competencies and readiness to assume safe patient care (Anderson, 2018).

The preceptorship process is very intense. It is integral that student nurses are compassionately mentored; hence, an authentic nurse leader can play a role in this process (Duteau, 2012). Being authentic nurse leaders, preceptors can form positive relationships with student nurses to aid transition and reduce possible attrition (Kaihlainen et al., 2018). Too often, novice nurses have left the profession after graduation, where nursing attrition ranged from 7% to 20%, and 30% to 50% changed positions or left the profession entirely after three years in practice (Goodare, 2017). In a nerve-racking pandemic, these percentages could increase as novice nurses may experience low self-efficacy, dissatisfaction, and poor job performance. Preceptors as authentic nurse leaders are vital to mentoring novice nurses and assisting their self-efficacious transition into nursing (Bryan & Vitello-Cicciu, 2020).

Theoretical framework

The current study is rooted in the theories of authentic leadership and self-efficacy. Authentic leadership theory holds that leaders who demonstrate authenticity utilize life experiences and psychological capacities such as hope, optimism, and self-efficacy to bring about positive morals and behavior among nurses who they refer to as followers (Wong & Laschinger, 2013). This section discusses the theories of authentic leadership and self-efficacy.

Authentic leadership

Authentic leadership is a form of relational leadership that encourages transparent and ethical leader behavior that fosters openness with others to bring about self-awareness and self-development (Avolio et al., 2004). An authentic leader is genuinely present in an interactive relationship to bring about the growth and development of all involved (Alilyyani et al., 2018). Authentic leadership creates a positive environment that fosters greater self-awareness of internalized moral perspectives, balance processing of information, and relational transparency, which are foundational characteristics to achieving the theory's goal to foster positive self-development (Wong & Laschinger, 2013). Self-awareness involves sensemaking of the world, knowing one's strengths, limitations, values and beliefs, and impact on others (Bryan & Blackman, 2019). Balanced processing is the thoughtful consideration of others' opinions to make decisions objectively (Bryan & Vitello-Cicciu, 2020). Internalized moral perspective helps individuals remain true to their core values as they role model high standards of ethical and moral conduct when making decisions (Bryan & Blackman, 2019). Relational transparency is the ability to share information, thoughts, and feelings with others (Avolio et al., 2004).

Authentic leadership contributes to creating a positive and healthy work environment free of uncertainty to stimulate trust, hope, and positive emotions, which are considered mediating variables in the authentic leadership model (Avolio et al., 2004). According to the authentic leadership model, job satisfaction and job performance are influenced by authentic leaders. Deep connection creates positive relationships and an association between authentic leadership and job satisfaction (Bennett, 2015) and job performance (Wong & Laschinger, 2013).

Job satisfaction

Job satisfaction in nursing is how well individuals enjoy what they do as a career (Stamps, 1997). Authentic nurse leaders play an integral role in contributing to the job satisfaction of novice nurses (Giallonardo et al., 2010). In this study, job satisfaction is nursing students' general fulfillment and gratification in carrying out their roles, responsibilities, and duties as a nurse. It is recognized that student nurses are not employed, but it is their satisfaction with selecting nursing as a career and the fulfillment they experience in accomplishing nursing tasks as they transition into the licensed nurse role that were of interest.

Job performance

Job performance is how successful an individual can complete a series of activities related to a discipline (Ng & Feldman, 2010). In this study, job performance is nursing students' self-evaluation of their abilities to competently perform the duties and responsibilities associated with being a nurse. Authentic leadership's promotion of psychological capacities can enhance nurses' motivation and improve performance outcomes and retention (Alilyyani et al., 2018).

Self-efficacy

Self-efficacy is an individual's perception of their abilities to accomplish a set of tasks or goals. It is influenced by one's thoughts, feelings, motivations, and actions (Bandura & Locke, 2003). Self-efficacy is brought about by four factors of mastery experience (successful attempts at accomplishing the task), vicarious experience (seeing others achieve their goals), verbal persuasion (receiving positive feedback), and somatic and emotional states (self-evaluation of one's feelings about accomplishing the task) (Bandura, 1995).

Applicability of the theories to nursing

Both theories of authentic leadership and self-efficacy have been used in nursing research. The applicability of self-efficacy to nursing preceptorship was shown by an older study where final year RN students reported an increase in self-efficacy after engaging in the 12 weeks of preceptorship experience (Goldenberg et al., 1997). More recently, 193 RN students in the USA (George et al., 2017) and 112 final year RN students in Iran (Rambod et al., 2018) reported high self-efficacy and achievement of learning outcomes after engaging in preceptorship. However, the applicability of authentic leadership to nursing students preceptorship is sparse with only one study reporting final year RN students perceived their preceptors to demonstrate authentic leadership ($M = 3.21$, $SD = 0.76$) which was positively associated with students' psychological capital ($r = 0.35$, $p < .05$) and all its subscales including self-efficacy ($r = 0.40$, $p < .05$), hope ($r = 0.38$, $p < .05$), and resilience ($r = 0.36$, $p < .05$) (Anderson, 2018). Based on Anderson's study, self-efficacy increased nursing students' commitment to the profession and reduced thoughts of withdrawing; however, self-efficacy was not examined independently but as a subset of psychological capital. No published research was identified that examined the relationship between authentic leadership and final year nursing students' self-efficacy, job satisfaction, and job performance. Hence, the following research questions:

1. How do nursing students perceive the authentic leadership of preceptors at the end of their preceptorship experience?
2. How do nursing students rate their self-efficacy before and after their preceptorship experience?
3. Is there an association between perceived preceptor authentic leadership and nursing students' self-efficacy beliefs, job satisfaction, and job performance as indicated by students at the end of their preceptorship experience?
4. Does self-efficacy mediate the relationship between nursing students' perceptions of preceptors' authentic leadership and their job satisfaction and job performance as indicated by students at the end of their preceptorship experience?

Methods

Study design

A correlational study using a pre-test post-test approach was done. The independent variable in this study was perceived preceptors' authentic leadership, while the dependent variables were job satisfaction and job performance. Self-efficacy was the mediating variable.

Setting and sample

The study was conducted at three nursing schools located in an urban city in Alberta, Canada. Nursing students ($N = 376$) enrolled in two four-year baccalaureate programs approved by CRNA (2019) and a two-year practical nurse diploma program approved by CLPNA (2018) were approached to participate in the study. The inclusion criteria were: 1) final year nursing student enrolled in an approved RN or LPN program, 2) enrolled in the preceptorship course, and 3) only having one preceptor for the preceptorship. LPN and RN students were chosen due to the nursing staff mix and distribution in Alberta. The preceptors' education credentials or the difference in the scope of practice of RNs and LPNs were not considered in this study as the focus was on the leadership provided to student nurses during the preceptorship experience. Random sampling was used to ensure that each final year nursing student in the entire population had an equal chance of being included (Martin & Bateson, 1993). The final sample consisted of 94 RN ($n = 71$) and LPN ($n = 23$) students who submitted completed and useable surveys resulting in a 69.6% response rate. According to G*Power 3 (Cunningham & McCrum-Gardner, 2007), a minimum sample size of ($n = 55$) was required a priori based on an alpha of 0.05 and a power level of 0.80 to detect a moderate effect size of 0.15.

Data collection

Data were collected over eight months in 2018. Students were invited to participate in the study at the preceptorship orientation at each school. A research team member presented an overview of the study including its purpose and risks. Students who opted to participate provided written consent and completed a 15-item online or paper-based survey about their current self-efficacy and demographic data such as their names and contact information to facilitate follow-up to complete the second survey post preceptorship. At the end of their preceptorship experience, students were contacted via email to complete the second survey online about their preceptor's authentic leadership and self-report about their post preceptorship self-efficacy, job satisfaction, and job performance. After the initial email invitation to complete the second survey, students were sent a reminder email weekly for a month to encourage participation.

Instruments

The survey instrument consisted of four standardized scales. Participants completed the *Adapted Self Efficacy Scale* ([ASE], George et al.,

2017) twice, rating their self-efficacy before and after the preceptorship experience. The *Authentic Leadership Questionnaire* ([ALQ], Avolio et al., 2007) was used to measure perceptions of preceptors' authentic leadership. The ALQ consists of 16 Likert-type items divided among four subscales of self-awareness, balanced processing, internalized moral perspectives, and relational transparency. The four scales are averaged for a total authentic leadership score. The *Global Job Satisfaction Survey* measured nursing students' job satisfaction. This tool was chosen as it does not emphasize pay and promotion, which would not apply to the nursing student population. Instead, it measures job satisfaction in relation to satisfaction with the tasks associated with the professional role, supervision, interaction with leaders, patient contact, flexibility, satisfaction with colleagues, and involvement in the decision-making process (Pond & Geyer, 1991; Rice et al., 1991) which was adequate for the participants in this study in their capacity as a student nurse. On the survey, nursing students were asked to rate their perception of their satisfaction with nursing as a career based on their preceptorship experience. Roe et al.'s (2000) *General Performance Scale* measured nursing students' job performance. On the survey, nursing students were asked to think about their performance during the preceptorship practicum and rate it according to their perceptions of fulfilling different tasks and roles during the practicum.

The validity of the ASE, ALQ, Global job satisfaction survey, and General performance scale have been shown by previous studies (George et al., 2017; Rice et al., 1991; Roe et al., 2000; Wong & Laschinger, 2013). For reliability purposes, Cronbach's alphas were in acceptable ranges for ALQ (0.94), ASE pre (0.88) and post preceptorship (0.89), global job satisfaction survey (0.93), and general performance scale (0.85). The overall Cronbach's alpha of the complete instrument used in the current study was 0.95.

Data analysis

Data were entered, cleaned, and analyzed using the Statistical Package for the Social Sciences (SPSS) Version 25.0 for Windows. The ASE, ALQ, Global Job Satisfaction Survey, and the General Performance Scale scores were averaged for each participant to facilitate analysis according to the research questions. Descriptive statistics were used to provide summary values of the sample, frequencies, and measures of central tendency specific to perceived preceptors' authentic leadership scores. Paired samples *t*-test was used to determine differences between nursing students' self-efficacy scores before and after the preceptorship experience. Pearson's correlation coefficient was used to determine the association between perceived preceptor authentic leadership and nursing students' self-efficacy, job satisfaction, and job performance. Mediated multiple regression analysis was done to determine if self-efficacy mediated the relationship between authentic leadership and job satisfaction (Baron & Kenny, 1986) and authentic leadership and job performance (MacKinnon & Dwyer, 1993). The steps of mediated regression analysis were followed (Table 1). Significance was determined by $p \leq .05$.

Full or partial mediation was determined in step 4. Full mediation occurs when the relationship between the independent and dependent variable is non-significant in the presence of the mediator variable. While partial mediation is when the relationship between the independent and dependent variables is weaker in the presence of the mediator variable (Baron & Kenny, 1986).

Ethical consideration

Ethical approval was obtained from the university of study origin (REB17-1618_REN1) and the institutional review board of the three nursing schools. Once data collection was completed, the data was anonymized using codes, and all personal information was destroyed.

Table 1
Showing steps of mediation regression analysis in relation to the study's variables.

Mediated regression analysis steps		Applicability to study
1	Determine relationship between the independent and mediating variables	Determine relationship between authentic leadership and self-efficacy.
2	Determine relationship between the independent and dependent variables	Determine relationship between: authentic leadership and job satisfaction authentic leadership and job performance
3	Determine relationship between the mediating variable and dependent variables (not required for MacKinnon & Dwyer, 1993)	Determine relationship between: Self-efficacy and job satisfaction Self-efficacy and job performance
4	Determine mediation if the relationship between the independent and dependent variables are non-significant or weaker when the mediator is included in the regression.	Determine mediation if the relationship between the independent (authentic leadership) and dependent variables (job satisfaction and job performance) are non-significant or weaker when the mediator (self-efficacy) is included in the regression.

Results

The sample consisted of RN (75%) and LPN (25%) final year nursing students, where 93% identified as female and 7% as male. Majority of the final year nursing students who participated spent at least three months (71%) with their preceptor and completed the preceptorship in a hospital (74%) or community health setting (26%). Results are presented according to the research questions.

Perceived preceptor authentic leadership

Preceptors were perceived to demonstrate moderate to high levels (Table 2) of authentic leadership ($M = 3.21, SD = 0.68$) with internalized moral perspective rating the highest among the four subscales ($M = 3.38, SD = 0.67$).

Self-efficacy before and after preceptorship

ANOVA was done on the pre-preceptorship self-efficacy scores to determine if students' abilities could explain a change in self-efficacy scores after the preceptorship practicum (suggesting differences between the schools). The one-way ANOVA revealed, no statistically significant differences between the three groups of nursing students ($F(2, 91) = 1.73, p = .18, \eta^2 = 0.04$). Paired samples *t*-test was done to compare the nursing students' self-efficacy before and after the preceptorship. There was a significant difference in final year nursing students' pre ($M = 2.96, SD = 0.45$) and post ($M = 3.19, SD = 0.47$) preceptorship self-efficacy scores ($t(93) = 3.96, p < .001$). Nursing students' self-efficacy increased after the preceptorship (Fig. 1).

Table 2
Mean perceived authentic leadership scores of final practicum nursing preceptors.

Scale	Mean	SD	Range	
			Minimum	Maximum
Self-awareness	3.14	0.88	0.00	4.00
Balanced processing	3.06	0.79	0.67	4.00
Internalized moral perspective	3.38	0.67	0.75	4.00
Relational transparency	3.28	0.72	0.80	4.00
Total authentic leadership	3.21	0.68	1.14	4.00

Note. Scores can be between 0 and 4, with higher scores indicating high authentic leadership.

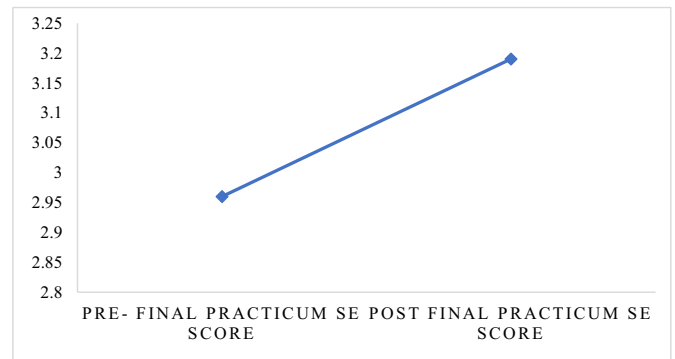


Fig. 1. Mean scores of final year nursing students' self-efficacy (SE) before and after the preceptorship practicum.

Perceived preceptors' authentic leadership relationship with self-efficacy, job satisfaction, and job performance

Pearson's correlation revealed a positive, significant, and moderate relationship between perceived preceptor authentic leadership and nursing students' self-efficacy beliefs ($r(93) = 0.46, p < .001$) and job satisfaction ($r(93) = 0.49, p < .001$). Positive and significant relationships were also observed among the authentic leadership subscales (Table 3). Suggesting that as final year nursing students' perceptions of preceptors' authentic leadership increase, students' self-efficacy and job satisfaction increase. However, there was a statistically non-significant, slight to almost negligible association between perceived authentic leadership and job performance ($r(93) = 0.04, p = .74$).

Self-efficacy mediating relationship between authentic leadership, job satisfaction and job performance

Baron and Kenny's (1986) four steps of mediated regression analysis were followed to determine if self-efficacy mediated the relationship between perceived preceptor authentic leadership and nursing students' job satisfaction:

- a) Authentic leadership was positively and significantly related to self-efficacy ($\beta = 0.46, t(92) = 4.90, p < .001$). This is called path a.
- b) Authentic leadership was positively and significantly related to job satisfaction ($\beta = 0.49, t(92) = 5.41, p < .001$). This is called path c.
- c) Self-efficacy was positively and significantly related to job satisfaction ($\beta = 0.31, t(92) = 3.12, p = .002$).
- d) Paths b and c' of the model were identified when self-efficacy was taken into account in the equation between authentic leadership and job satisfaction; authentic leadership remained significant ($\beta = 0.44, t(91) = 4.32, p < .001$) but self-efficacy ($\beta = 0.11, t(91) = 1.09, p = .28$) became non-significant (Fig. 2).

Table 3
Correlations between authentic leadership and self-efficacy, job satisfaction and performance.

Authentic leadership	Self-efficacy	Job satisfaction	Job performance
	<i>r</i>	<i>r</i>	<i>r</i>
Self-awareness	0.43***	0.42***	-0.04
Balanced processing	0.41***	0.44***	0.08
Internalized moral perspective	0.45***	0.45***	0.08
Relational transparency	0.32***	0.44***	0.02
Total authentic leadership	0.46***	0.49***	0.04

r value between 0.4 and 0.7 indicated moderate correlation (Sprinthall, 1987). Note. ($n = 94$).
*** $p < .001$.

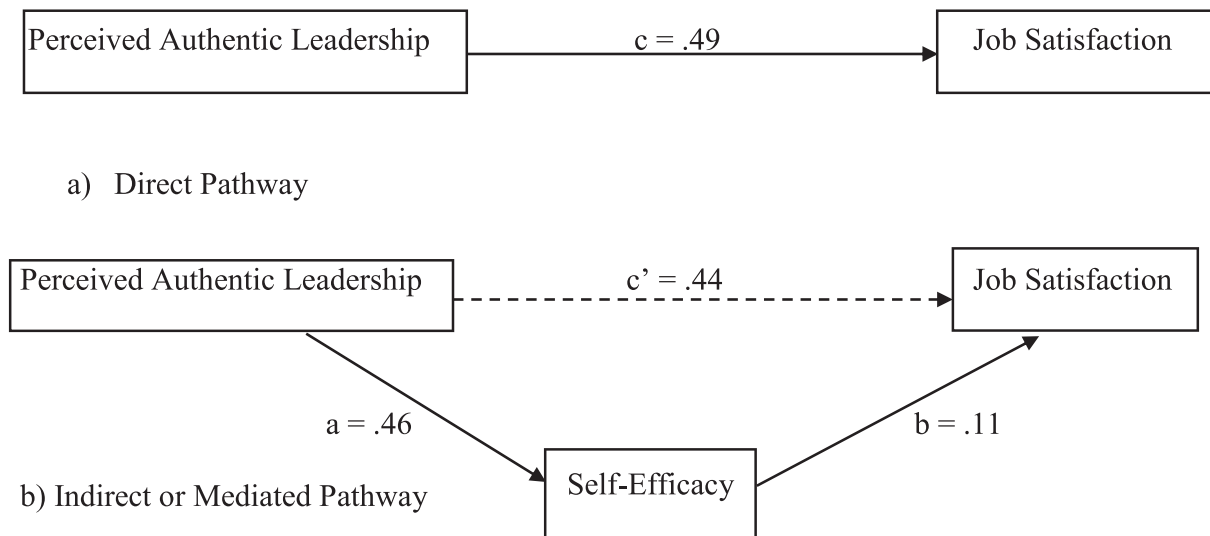


Fig. 2. Model testing self-efficacy mediating the relationship between perceived authentic leadership and job satisfaction (based on Baron & Kenny, 1986).

Self-efficacy did not mediate the relationship between authentic leadership and job satisfaction ($F(2, 91) = 15.24, p < .001, R^2 = 0.25$, adjusted $R^2 = 0.23$). Additionally, no significant mediated effect ($z = 1.05, p = .30$) was shown by Preacher and Hayes (2004) simple mediation procedure for Sobel test to determine indirect effect.

Considering that authentic leadership had a statistically non-significant relationship with job performance, the Baron and Kenny method conditions were not met. Therefore, MacKinnon and Dwyer's (1993) method of mediation regression analysis was used to determine if self-efficacy mediated the relationship between authentic leadership and job performance (Fig. 3):

- a. Perceived authentic leadership did not significantly affect job performance ($\beta = 0.04, t(92) = 0.34, p = .74$).
- b. Perceived authentic leadership was positively and significantly related to self-efficacy ($\beta = 0.46, t(92) = 4.90, p < .001$).

c. Perceived authentic leadership affected job performance ($\beta = -0.21, t(91) = -2.08, p = .04$) as mediated through self-efficacy ($\beta = 0.55, t(91) = 5.3, p < .001$).

Self-efficacy mediated the relationship between perceived preceptor authentic leadership and job performance ($F(2, 91) = 14.28, p < .001, R^2 = 0.24$, adjusted $R^2 = 0.22$). Approximately 24% of the variance in job performance was accounted for by the predictors, where the relationship between authentic leadership and job performance was significantly mediated by self-efficacy ($\beta = 0.25, SE = 0.07, z = 3.57, p < .001$) as supported by Preacher and Hayes' (2004) Sobel test.

Discussion

This study explored the relationship between perceived preceptor authentic leadership and student nurses work attitude of job satisfaction and follower behavior of job performance as proposed in Avolio et al.'s (2004) theory among final year RN and LPN students. According to the

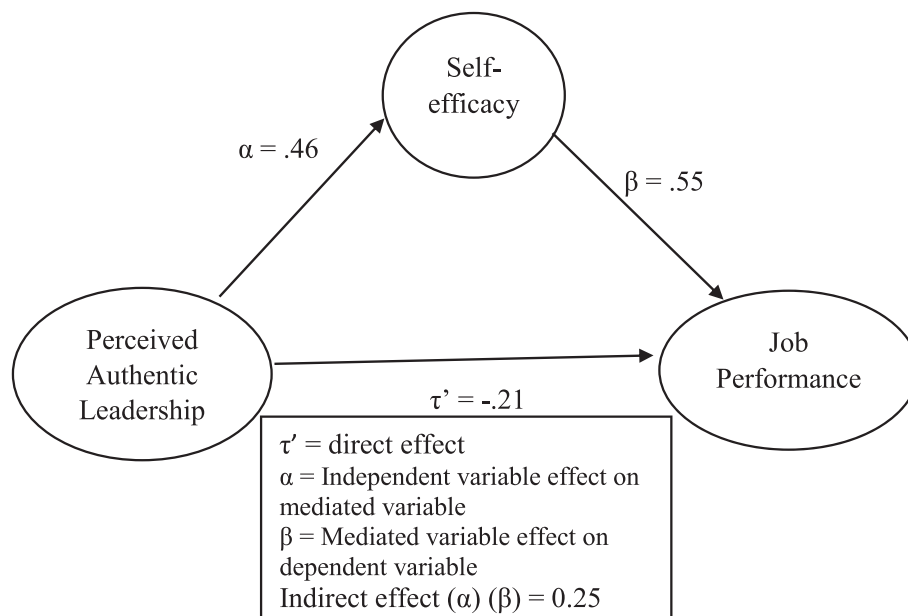


Fig. 3. Model testing self-efficacy mediating the relationship between perceived authentic leadership and job performance (based on MacKinnon & Dwyer, 1993).

findings of the current study, preceptors were perceived to demonstrate authentic leadership, which was associated with final year nursing students' self-efficacy, job satisfaction, and job performance. New to the current study was self-efficacy as a mediator to explain the association between authentic leadership and the outcomes of nursing students' job satisfaction and job performance. As a mediator, self-efficacy, explained the relationship between job performance and perceived preceptor authentic leadership but not job satisfaction. In essence, a chain of relationships was observed where perceived preceptor authentic leadership had a relationship with self-efficacy, which affected the relationship with job performance.

Overall, preceptors were perceived to demonstrate moderate to high levels of authentic leadership, which is congruent with a similar study conducted in Ontario, Canada, among final year RN students (Anderson, 2018), and the general nursing leadership literature (Bennett, 2015; Giallonardo et al., 2010; Wong & Laschinger, 2013). It is commendable that preceptors were perceived to demonstrate authentic leadership as authenticity is vital to be perceived as a leader (Vitello-Cicciu, 2019). According to the four foundational characteristics of self-awareness, internalized moral perspectives, balanced processing, and relational transparency, the preceptors were perceived as leaders. Of these four characteristics, preceptors internalized moral perspective was rated the highest, suggesting congruence with their beliefs and actions, leading by example, and being able to make decisions based on core values (Fallatah & Laschinger, 2016). The trend has been internalized moral perspective in the nursing literature, followed by relational transparency, balanced processing, and self-awareness (Bennett, 2015; Giallonardo et al., 2010; Wong & Laschinger, 2013). However, the current study identified a different trend where self-awareness was rated higher than balanced processing. This new trend could be seen as a corrective action in nursing leadership as previous nursing studies have called for increased self-awareness (Bennett, 2015). However, we still cannot ignore the need to engage in behaviors associated with balance processing, such as soliciting nurses' views before making decisions.

The increase in nursing students' self-efficacy at the end of the preceptorship experience is applaudable. However, it must be interpreted with caution as many other variables may account for this significant increase in self-efficacy that was not tested for. Notwithstanding, this is good, as increased feelings of self-efficacy will help in the transition process (Duchscher, 2009). Similar findings have been identified in the last two decades (Goldenberg et al., 1997). As such, the role of preceptors leading the transition of LPN and RN students during the final preceptorship practicum is valuable and vital to the development of student nurses' self-efficacy, aiding the transition to licensed nurses to provide safe, competent, and ethical nursing care (Chen et al., 2021; George et al., 2017). The importance of preceptors' leadership to the development of nursing students' self-efficacy was further seen with the positive and significant association between perceived preceptor authentic leadership and the nursing students' self-efficacy.

Preceptors' authentic leadership was associated with the students' job satisfaction with nursing as a career. This was consistent with the current nursing literature that reported positive and significant relationship between authentic leadership and job satisfaction among the new graduate nursing population (Bennett, 2015; Fallatah & Laschinger, 2016) which could be likened to final year RN and LPN students. These findings support the applicability of the authentic leadership model in nursing, specifically pre-registration nursing students in engendering follower attitude of job satisfaction as connections are developed with nurse leaders, the profession, and colleagues (Avolio et al., 2004; Fallatah & Laschinger, 2016).

Preceptors' authentic leadership was not associated with nursing students' job performance. A plausible explanation is that nursing students need to complete their preceptorship to earn the credentials from the nursing program. As such, students are motivated to perform the duties, skills, and functions of a nurse regardless of the relationship shared with the preceptor. The current study's findings were consistent

with the nursing literature, where a direct association with job performance has not been identified (Alilyyani et al., 2018). However, the findings of an indirect relationship between job performance and authentic leadership through a mediator (a variable that explains the relationship's mechanism between two variables) are not new (Wong & Laschinger, 2013).

In this study the relationship between authentic leadership and job performance was explained by self-efficacy. Self-efficacy is integral to one's motivation and drives performance to accomplish goals and tasks associated with a discipline (Bandura & Locke, 2003). Hence, it is not surprising that the positive relationship between self-efficacy and perceived preceptor authentic leadership affected students' job performance. If students are anxious and fearful when thinking about the preceptorship experience, this could erode their self-efficacy and further impact their job performance and could impede their transition into nursing. However, the students in this study identified that preceptors demonstrated authentic leadership, which is integral to creating healthy work environments (Vitello-Cicciu, 2019), thereby impacting students' self-efficacy and job performance. Self-efficacy has not mediated the relationship between authentic leadership and job satisfaction and job performance before, which hampers comparison. However, this study supports that self-efficacy is an effective mediator between final year nursing students' job performance and perceived preceptors' authentic leadership.

Implications

This study has implications for nursing stakeholders who are integrally involved in the transition process of nursing students to licensed practitioners. The findings suggest that it is advantageous to have authentic preceptor leaders guiding final year students' transition. High ethical standards, self-awareness, relational transparency, and involving nursing students in the decision-making process of nursing care have proven integral to nursing students' self-efficacy, job satisfaction, and job performance. The impact of authentic leadership on this learning environment could also affect nursing students' intention to remain in the profession that is currently suffering from high turnover due to burnout and heightened stress of a global pandemic. Authentic leadership contributes to an atmosphere of authenticity and freedom where people grow and self-develop, which may be essential to retaining the next generation of nurses.

Limitations of the study

The study was limited to one city in Western Canada; as such, findings cannot be generalized, however, the findings have been congruent with the Canadian and international nursing literature. The role differences or the level of experience or degree held by the preceptors involved were not considered, which could have impacted the findings. For future studies, preceptors and faculty mentors could also be included to garner a broader perspective on the overall preceptorship experience, particularly related to job performance that could have been impacted by self-reference bias, social desirability, and halo effect.

Conclusion

This study examined the relationship between perceived preceptor authentic leadership and final year nursing students' self-efficacy, job satisfaction, and job performance. The findings suggest that perceived preceptor authentic leadership was associated with increased feelings of self-efficacy and job satisfaction among final year nursing students. Preceptors are integral to the transition process of nursing students; as such, the preceptorship process could be enhanced by applying the authentic leadership model. The findings have implications for positive nursing students' transition into their roles as competent, ethical, and safe nurses and even more long-lasting effects on retention of RNs and

LPNs. This study adds to the nursing leadership literature as it is among the first to explore the applicability of Avolio et al.'s (2004) authentic leadership model among both RN and LPN students.

Declaration of competing interest

None.

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