2023

Comparisons of Impostor Phenomenon Among Nursing Faculty Across Teaching Levels, Teaching Experience, and Gender

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Abstract

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Nursing Education

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Abstract

Nursing faculty must be effective educators, active nurse researchers, and practicing nurse experts. Feelings of impostor phenomenon (IP), defined as emotions of fraudulence, can lead to faculty deficiencies both as educators and scholars. The purpose of this three-manuscript dissertation, guided by Weiner's attribution theory, was to determine differences in IP by teaching level, teaching experience, and gender among nursing faculty. A two-tailed *t*-test was used to analyze data collected from 164 participants who completed the Clance impostor phenomenon scale. Data revealed instructors teaching at the undergraduate level had more feelings of IP than those teaching at the postgraduate and graduate levels. There were no significant differences noted in levels of IP comparing years of teaching experience or by gender. All nursing instructors had some level of IP. Acknowledging that IP exists in nursing faculty and finding ways to decrease feelings of IP will allow faculty to become more effective researchers and instructors. Future research should focus on how to combat IP in nursing faculty. As skilled instructors, faculty can provide students with the resources and guidance needed to become skilled graduate nurses able to identify and correct societal healthcare disparities and provide optimal care to improve healthcare outcomes for patients, families, and communities which effects positive social change.

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Dedication

I would like to dedicate this to my family. First, to my daughter, Emily Horvath, who will always be my greatest achievement. I want you to realize that you can do whatever you set your mind to, and I hope this is an example of that. To my parents, Phil, and Linda Bonnell, you have always supported me in my endeavors and given me the confidence and unconditional love to follow my dreams. A special thanks to my friends and colleagues Kathy and Maxine. Thank you for listening to my doubts and encouraging me to push through and complete my dissertation.

Acknowledgments

I would like to thank my dissertation committee, Dr. Deborah Lewis, Dr. Leslie Hussey, and Dr. Janice Long, for their help and feedback. I would especially like to thank my chair and mentor, Dr. Deborah Lewis, who has supported me and persuaded me to keep working in times when I was struggling through this process. I also want to thank all the nursing faculty who participated in my research. I could not have completed this journey without your help, and I greatly appreciate the time you took to complete my survey. Lastly, I would like to thank my family, friends, and colleagues for unwavering support during this process.

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Part 1: Overview

Introduction

Nurse educators in the academic setting are often considered experts and role models in the field of nursing by students and other practicing nurses (Bono-Neri, 2019). Nursing faculty are expected to prepare students who are competent and safe in practice to meet the continuously changing demands of healthcare and must be prepared to serve as educators, researchers, and clinical experts (Booth et al., 2016). Although faculty are seen as highly experienced and knowledgeable, they may experience emotions of fraudulence known as *impostor phenomenon* (IP) or *impostor syndrome* (Day-Calder, 2017).

Individuals who experience the effects of IP feel they are not as capable as their peers and often have feelings of being fraudulent in their professional undertakings (Lane, 2015). These feelings can lead to anxiety that their incompetence will eventually be exposed. Feelings associated with IP may also foster several types of avoidant behaviors. Those behaviors may include procrastination when completing job duties for fear of being exposed as a fraud and avoiding communication with colleagues, students, and superiors (Lane, 2015). The availability of faculty for student advisement and interaction is negatively affected by IP. Decreased communication with colleagues and superiors impacts scholarship and service expectations at the collegiate level. The combination of poor teaching outcomes, lack of scholarship, and lack of service leads to inadequate outcomes for the faculty member and for nursing students. Research has established that faculty who struggle with feelings of IP experience a collective emotional

toll that places them at a high risk of emotional exhaustion and job burnout (Hutchins, 2015).

Addressing the problem of IP among nursing faculty has the potential to improve interactions with peers, students, and superiors; improve teaching outcomes and scholarly service; and decrease job burnout. These improvements offer positive outcomes for faculty members, institutions, and nursing students (Hutchins, 2015).

By identifying factors that may cause nursing faculty to struggle with IP and providing a basis for further research, institutions can combat the problems associated with IP and develop strategies to improve the negative effects of IP (Hutchins, 2015). Institutions must have confident nursing faculty who are able to encourage and excite students about the nursing profession. Instructors who actively engage with students can improve critical-thinking abilities and better prepare students to enter the nursing profession (Gibbs & Kulig, 2017). Well-prepared graduate nurses can improve patient outcomes and decrease societal burdens for patients with poor outcomes and effect positive social change.

Background

Nursing practice must adapt to continually evolving scientific and technologic advancements as well as societal needs. Nurse educators have a diverse role that includes preparing students as professional nurses whose practice encompasses accommodation to changes in addition to direct patient care. Academic nursing faculty must be prepared to serve as educators, researchers, and clinical experts (Booth et al., 2016). IP can cause faculty to feel inadequate in their academic role despite evidence supporting their

competence (Walker, 2016). Intense feelings of intellectual and professional fraudulence may be detrimental to personal well-being and professional progression (Vergauwe et al., 2014). Parkman (2016) noted that faculty struggling with IP allow for fewer student interactions in a desire to limit visibility. This may lead to the perception of decreased teaching effectiveness as a nurse educator. Scholarship may also be affected as research opportunities are squandered due to fear of being exposed as a fraud (Parkman, 2016). These potential negative outcomes in scholarship and teaching lay the construct for unpleasant outcomes for the faculty member and the institution (Hutchins, 2015).

Current literature on IP is sparse; however, there is growing mention of IP in faculty development articles regarding factors that increase IP and common indicators of IP (Hutchins, 2015; Hutchins & Rainbolt, 2017; Hutchins et al., 2018). Research concerning IP has been focused on nursing students (Aubeeluck et al., 2016; Christensen et al., 2016) and nurse leaders (Ares, 2018; Haney et al., 2018). However, there is a gap in the literature regarding the extent to which faculty experience IP and the effects of IP on nursing faculty. The following review of literature explores instructors as experts in the profession of nursing, factors that may affect feelings of IP, the effects IP has on individuals, and the theoretical framework that supports this three-manuscript study.

Instructors as Experts

The American Association of Colleges of Nursing (AACN, 2015) noted that nursing faculty must have graduate-level knowledge of evidence-based research and practice, teaching methods, and curriculum design and development along with advanced expertise in their area of teaching. Nursing faculty with more than 5 years of teaching

experience are reported more self-confident and competent in the role of educator than their less experienced peers (Moore, 2020). The expectation is that all nursing faculty have mastery of differing teaching designs and advanced technology to promote learning and critical thinking (Bono-Neri, 2019). Faculty are also considered experts in curriculum design and research design to improve nursing practice (Bono-Neri, 2019).

Nursing students regard their instructors as vital suppliers of fundamental to advanced knowledge, skills, and values that will help them become competent and compassionate nurses (Padagas, 2020). Soroush et al. (2021) noted that students consider professional ethics, teaching experience, clinical expertise, and effective communication skills as characteristics of a superior instructor. Student feedback also related themes of organization, clear communication, easy accessibility, and timely responsiveness to faculty expertise (Nedegaard, 2016). In a literature review, Labrague et al. (2019) noted that students deem expert faculty to have professional competence in the classroom and clinical arenas along with the ability to form interpersonal relationships through caring, empathy, respect, approachability, and support.

IP Effects

Although literature on IP is not plentiful, certain themes arise from the existing literature. People with IP are successful, yet they consider themselves to be frauds and attribute their success to external factors, such as luck rather than ability (Chandra et al., 2019, p. 26). These individuals tend to be high achievers who have unrealistic internal standards (Chandra et al., 2019). Imposters score high on neuroticisms and anxiety and low on self-esteem, which may lead to depression and role dissatisfaction (Crawford et

al., 2016). In a cross-sectional survey study, Vergauwe et al. (2014) noted that increased IP is related to decreased self-efficacy, low scores of conscientiousness, high scores of neuroticisms, and the need for perfection. Clance postulated that IP feelings start to develop in childhood and are affected by learning experiences (Neureiter & Traut-Mattausch, 2016). Parkman (2016) examined previous literature linking family expectations of success and achievement to feelings of IP. People with IP are often recognized for excellence in their field and may have been pressured by others or themselves to succeed (Gardner, 2016). While other people have improved self-esteem after attaining success, IP sufferers experience an escalation in their sense of fraudulence (Neureiter & Traut-Mattausch, 2016b).

In professions where one gender is dominant, such as nursing, individuals of the opposite sex are more likely to demonstrate behaviors congruent with IP (Parkman, 2016). Ares (2018) surveyed clinical nurse specialists and found that 44% had moderate IP tendencies and noted that previous research showed significantly more women suffered from IP than did men. Also, female clinical nurse specialist students had higher imposter tendencies then other professional students when the Clance impostor phenomenon scale (CIPS) was used during a 1-day team-building workshop (Haney et al., 2018). A study of new music education faculty found that female faculty had more intense feelings of IP then their male counterparts did (Sims & Cassidy, 2018). Looking at gender and IP under two different conditions, Badawy et al. (2018) found that men experienced higher levels of IP when faced with negative feedback and high accountability for performance than their female counterparts. This contradicts many

previous study results (Badawy et al., 2018). Gender and gender role orientation were used in a quantitative study to see if women or participants with feminine qualities were more likely to have higher levels of IP. Results showed that male students had less extreme IP feelings than women, and masculine or androgenous students had lower IP scores than feminine students (Patzak et al., 2017). Looking at the effects of gender stigma consciousness (GSC) and IP on academic success, Cokley et al. (2015) found that GSC was a strong predictor for IP among women. However, both women and men who had assumed stereotypes about their gender's competence showed greater feelings of IP (Cokley et al., 2015). The same study showed that academic self-concept or confidence was lower in both women and men with higher IP scores, and that higher women with high IP scores had higher grade-point averages (GPAs), but men with high IP scores had no correlation with higher GPAs (Cokley et al., 2015). When comparing the prevalence of burnout and IP in male versus female general surgeons, two blinded surveys revealed no statistical significance in IP scores (Leach et al., 2019). Using a quantitative design to compare feelings of IP among men and women in the field of information technology, data showed no significance in levels of IP by gender (Mclean & Avella, 2016).

Focusing on IP within the academic setting, the need is to determine faculty feelings of IP and the impact they have on professional success (Hutchins et al., 2018). IP is more often seen in people with advanced degrees who aspire to perfectionism (Parkman, 2016). In academia, the competition for research funding may heighten feelings of IP (Hutchins, 2015). Researchers created a self-report questionnaire to evaluate college librarians' incidence of IP, which revealed that younger and less

experienced librarians had higher IP scores than their more experienced colleagues (Clark et al., 2014). Librarians were also encouraged to confront their IP feelings in a presentation at the Ontario Library Association Super Conference in 2017, which was also published to note that less experienced librarians had higher IP levels (Lacey & Parlette-Stewart, 2017). Music education faculty were also found to have more intense feelings of IP early in their teaching careers (Sims & Cassidy, 2018).

A quantitative design was used to determine if IP contributed to emotional drain and job satisfaction among university faculty (Hutchins et al., 2018). Results showed that IP may influence emotional exhaustion, which may affect job satisfaction (Hutchins et al., 2018). In an earlier study, Hutchins (2015) looked at nontenured versus tenured faculty for IP tendencies in addition to levels of emotional drain and coping mechanisms. Results showed that feelings of IP lessen as faculty achieved tenured status and that tenured faculty have developed better strategies to cope with IP (Hutchins, 2015). Researchers focusing on IP impact in higher education noted that an early indication of increased IP may be decreased student interaction, including limited faculty availability to students for advising, and skills, which may lead to negative faculty evaluations by students and superiors (Parkman, 2016). Research and scholarship can also be affected as faculty with increased feelings of IP avoid publishing and presenting material for fear of being seen as a fraud (Parkman, 2016).

Theoretical Framework

The theoretical framework for this study was Weiner's attributional theory of motivation and emotion. *Attribution* is defined as an ascribed quality or characteristic or

an interpretation about causes of specific behaviors (Merriam-Webster Dictionary, 2004). Attribution theory involves the perceived causes of success and failure and the motivational consequences of specific attributions, paying particular interest to causal relationships between emotions and achievement performance (Weiner, 1985). Attribution theory postulates that how a person thinks will influence interacting factors, causing a variety of emotional responses (Weiner, 1985, p. 119). Weiner focused on associating attributional thinking with certain emotional responses. Weiner's theory is acknowledgment that recognizing how people attribute causes of their behavior influences their determinations on how to manage the behavior (Weiner, 1985).

Several human emotions are incorporated within attribution theory, including happiness, frustration, pride, anger, pity, gratitude, shame, hope, and fear. The concentration in the three manuscript studies will be specific to causal locus and self-esteem (pride). Given that individuals experiencing IP have distinct attributions concerning how they explain positive and negative events, using Weiner's attribution theory is helpful in explaining the way in which faculty may experience IP (Hutchins, 2015). Faculty who suffer from feelings of IP are more likely to experience negative emotions because they consistently attribute their successes to external sources or prescribe to self-blame for any problematic endeavors (Hutchins, 2015). A qualitative design was used to examine events that may lead to feelings of IP for collegiate faculty and what methods of coping might be beneficial to quell IP. The main triggers for feelings of IP are questioning expertise, scholarly productivity, comparisons to other faculty, and accepting success (Hutchins & Rainbolt, 2016). Coping strategies differ

depending on gender as female faculty use social support and male faculty initiate avoidance and substance abuse (Hutchins & Rainbolt, 2016).

There is a gap in the literature concerning how feelings of IP affect nursing faculty. By identifying if nursing faculty suffer from IP and how IP affects teaching abilities, this three-manuscript dissertation will explore if there are differences in levels of IP in nursing faculty by level of teaching, years of teaching experience, and gender. Recommendations can be formulated concerning coping mechanisms and resources that could support faculty struggling with this phenomenon.

Overview of the Manuscripts

Although IP research has been focused on nursing students (Aubeeluck et al., 2016; Christensen et al., 2016), nurse leaders (Ares, 2018; Haney et al., 2018), and college faculty (Hutchins, 2015; Hutchins & Rainbolt, 2017; Hutchins et al., 2018), there is a gap in the literature regarding the effects of IP on nursing faculty. Determining what factors cause nursing faculty to experience IP can help to further identify the effects IP has on faculty–student and faculty–faculty interactions and how IP may affect teaching abilities. Further, recommendations can be formulated concerning coping mechanisms and resources that could support nursing faculty struggling with this phenomenon. The three manuscripts are framed as parallel projects to address the gap in the literature in understanding whether nursing faculty suffer from IP and what factors may cause increased feelings of IP among this population. Factors studied concerning IP included teaching level (undergraduate versus graduate), teaching experience, and faculty gender.

Manuscript 1

Faculty who teach at the graduate level often have more experience in academia then faculty teaching at the undergraduate level (Laurencelle et al., 2016). No research concerning differences in levels of IP in faculty teaching graduate-level courses versus faculty teaching undergraduate-level courses was found in the literature. With examination of possible symptoms of IP in both undergraduate and graduate nursing faculty, determination of how IP affects faculty can be explored.

Research Question

What is the difference in levels of IP among nursing faculty who teach at the graduate level compared to nursing faculty who teach at the undergraduate level?

Nature of the Study

The nature of this study was a quantitative comparative analysis to examine the difference in levels of IP symptoms in nursing faculty who teach at the undergraduate level compared to nursing faculty who teach at the graduate level. Quantitative research is used to examine the relationship among variables and determine interconnection between variables (Grove et al., 2016) In this study, I specifically looked at the interconnection of IP and nursing faculty and the relationship between teaching level and IP.

Possible Types and Sources of Data

I collected data using an online survey of nursing faculty from various institutions of higher learning. I recruited nursing faculty from various degree programs to obtain a

robust and varied participant pool. The survey design included demographic data and the CIPS (Clance, 1986).

Manuscript 2

Faculty with fewer than 5 years in the academic setting often experience greater levels of uncertainty in their expertise as early career academics than do faculty with more academic experience (Hutchins, 2015). However, research is limited to nonspecific higher education faculty. Manuscript 2 will compare the impact of IP on nursing faculty with fewer than 5 years of teaching experience to faculty with 5 years or more of teaching experience.

Research Question

What is the difference in levels of IP in nursing who have more than 5 years teaching experience compared to nursing faculty who have fewer than 5 years teaching experience?

Nature of the Study

The nature of this study was a quantitative comparative analysis to examine the difference in levels of IP symptoms among nursing faculty with fewer than five years of teaching experience compared to nursing faculty who have more than 5 years teaching experience. Quantitative research is used to examine the difference among variables and determine interconnection between variables (Grove et al., 2016). In this study, I specifically looked at the interconnection of IP and nursing faculty and the relationship between teaching experience and IP.

Possible Types and Sources of Data

I collected data using an online survey of nursing faculty from various institutions of higher learning. I recruited nursing faculty from various degree programs to obtain a robust and varied participant pool. The survey design included demographic data and the CIPS (Clance, 1986).

Manuscript 3

Gender may play a role in feelings of IP as nursing is a female-dominated profession. The lack of male instructors is noted in the academic setting; the National League for Nursing (NLN, 2017) noted that 6.4% of full-time nurse educators are male. Research concerning gender and IP has revealed that both men and women experience IP in the academic setting. However, studies have reported varying data as to whether men or women experience higher levels of IP (Badawy et al., 2018, Patzak et al., 2017). The third manuscript is designed to compare the impact IP has on male nursing faculty compared to female nursing faculty. The results could suggest that faculty working in a profession where one gender dominates the workforce could be highly affected by IP.

Research Question

What is the difference in levels of IP in female nursing faculty compared to male nursing faculty?

Nature of the Study

The nature of this study was a quantitative comparative analysis to examine the difference in levels of IP for female nursing faculty compared to male nursing faculty.

Quantitative research is used to examine the relationship among variables and determine interconnection between variables (Grove et al., 2016).

Possible Types and Sources of Data

I collected data using an online survey of nursing faculty from various institutions of higher learning. The survey encompassed faculty from various degree programs to obtain a robust and varied participant pool. The survey design included demographic data and the CIPS (Clance, 1986).

Significance

As the world's population lives longer, the number of people worldwide needing medical care will call for an increased demand for nurses. These future nurses will need high-quality instructors to provide optimal didactic and clinical experiences. Currently, deficient numbers of skilled faculty cause nursing programs to refuse qualified applicants (Grassley et al., 2020). This is contributing to the nursing shortage. Having instructors who are not confident in their abilities due to feelings of IP further stresses the potential for institutions to produce capable nursing graduates. Research is needed to see what causative factors produce feelings of IP in nursing faculty and how this directly and indirectly affects nursing students' quality of education. This three-manuscript dissertation was conducted to address the gap in the literature by investigating whether teaching experience, teaching level, and gender play a role in faculty members' feelings of IP.

Significance to Discipline

Effective nursing faculty must be confident in the classroom, exhibit clinical expertise, and be productive scholars in nursing research (Booth et al., 2016). Feelings of IP can hinder these expected traits. Identifying if nursing faculty experience IP and potential factors that cause these feelings will provide a foundation for additional research on ways individual faculty members, nursing programs, and academia can combat IP. Developing coping strategies and targeted interventions that focus on attributional reframing may lessen the effects of IP and improve performance attributions (Hutchins, 2015). This, in turn, will improve interactions with students, improve teaching outcomes, and allow faculty to seek out research opportunities.

Significance to Social Change

Key characteristics of expert faculty include clinical expertise, organization, easy accessibility, and the ability to form interpersonal relationships (Labrague et al., 2019). By eliminating or reducing nursing faculty's feelings of IP, these characteristics can be developed or enhanced. A learning environment within nursing education that promotes effective and clear communication, approachability, and timely responsiveness may create positive social change by producing well-rounded graduate nurses who have experienced optimum educational experiences and are thoroughly prepared to improve patient outcomes and decrease societal burdens for patients with poor outcomes.

Summary

The nursing profession is diverse and constantly changing through evidence-based practice and technological advancements. For nurse educators, the scope of nursing

practice extends beyond direct patient care to include preparing students for nursing practice (Booth et al., 2016). For educators to be effective, they need to be experts in curriculum development and clinical practice (AACN, 2015). Feelings of IP can undermine faculty members' abilities to be proficient educators. IP leads to decreased interaction with students, peers, and fellow academics. IP feelings also cause avoidance behaviors in the didactic and clinical settings and cause faculty to refrain from scholarly activities. IP has not been well researched, but exploration has included IP in nursing students (Aubeeluck et al., 2016; Christensen et al., 2016), nurse leaders (Ares, 2018; Haney et al., 2018), as well as college faculty (Hutchins, 2015; Hutchins & Rainbolt, 2017; Hutchins et al., 2018). No research has been specific to nursing faculty.

Weiner's (1985) attribution theory of motivation and emotion was the guiding framework to determine if faculty teaching experience, teaching level, or gender are mitigating factors for feelings of IP. The findings from this three-manuscript dissertation may lead to research on how to develop coping mechanisms to combat feelings of IP, enhance interaction within nursing programs among colleagues and with students, improve job satisfaction, and decrease burnout, which can effect positive social change. Each manuscript will explore a specific factor that may impact feelings of IP. These factors include whether faculty teach undergraduate or graduate, faculty years of teaching experience, and faculty gender.

Part 2: Manuscripts

Manuscript 1: Levels of Impostor Phenomenon Among Undergraduate and Graduate Nursing Faculty

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Outlet for Manuscript

The peer-reviewed, scholarly journal for submission of this manuscript is *Nurse Educator*. This journal's target audience is school of nursing faculty and administration. Topics accepted for submission include curriculum, and program development in the didactic and clinical settings, use of technology, faculty development, and research in nursing education. This journal aligns with the manuscript content as IP affects faculty development and scholarship.

Nurse Educator uses an online submission and review system for manuscript selection. Manuscripts should be prepared according to the *American Medical Association (AMA) Manual of Style* (11th edition). Original research should not exceed 16 pages, including abstract and references. Abstracts are limited to 150 words and should include the headings: Background, Purpose, Methods, Results, and Conclusion. Abstracts should include 4-5 keywords that are Medical Subject Heading (MeSH) terms.

Journal information can be accessed via: https://journals.lww.com/nurseeducatoronline/pages/default.aspx

Submission information can be accessed via: https://www.editorialmanager.com/ne/default.aspx

Abstract

Background: A major role of nursing faculty is to support nursing students in the didactic and clinical areas to promote effective learning and critical thinking. Imposter Phenomenon (IP) can cause faculty to develop deficiencies as educators, practicing nurses and scholars.

Purpose: Using Weiner's attributional theory of motivation and emotion, the purpose of this study was to determine if there was a difference in levels of IP in nursing faculty teaching at the undergraduate level compared to faculty teaching at the graduate level.

Methods: Participants (n = 164) were recruited via social media posts and e-mail. General demographic information was collected and the Clance IP scale (CIPS), survey instrument was utilized.

Results: Results were statistically significant (p = 0.047) showing that undergraduate level instructors have more feelings of IP than graduate level instructors.

Conclusion: Nursing instructors have feelings of IP; however, entry level instructors have increased levels of IP than their counterparts teaching at the graduate level.

Keywords: nursing, faculty, learning, critical thinking

Introduction

Nursing faculty must be equipped to serve as educators, researchers, and clinical experts to prepare safe, competent graduate nurses (Booth et al., 2016). Although faculty are seen as highly experienced and knowledgeable, they may experience emotions of fraudulence known as *impostor phenomenon* (IP) or *impostor syndrome* (Day-Calder, 2017). Research concerning the nursing profession and IP has been focused on nursing students (Aubeeluck et al., 2016; Christensen et al., 2016) and nurse leaders (Ares, 2018; Haney et al., 2018). There is a lack of literature concerning IP and its effects on nursing faculty.

Significance/Importance

Nurse educators have a diverse role that includes preparing students as professional nurses whose practice encompasses accommodation to changes in addition to direct patient care. IP causes feelings of inadequacy because faculty are unable to attribute their success to their own abilities (Walker, 2016). This leads to decreased interactions with students in classroom, clinical, and advisement situations (Parkman, 2016). This may lead to the perception of decreased teaching effectiveness as a nurse educator. Scholarship may also be affected as research opportunities are squandered due to fears of being exposed as a fraud (Parkman, 2016). These potential negative outcomes in scholarship and teaching lay the construct for unpleasant outcomes for the faculty member and the institution (Hutchins, 2015).

The theoretical framework for this study was Weiner's (1985) attributional theory of motivation and emotion. Attribution theory postulates how perceived success and

failure affect behavior and motivation, paying particular interest to causal relationships between emotions and achievement performance (Weiner, 1985). Additionally, attribution theory postulates how a person thinks will influence interacting factors causing a variety of emotional responses (Weiner, 1985, p. 119). Given that individuals experiencing IP have distinct attributions concerning how they explain positive and negative events, using Weiner's attribution theory is helpful in explaining the way in which faculty may experience IP (Hutchins, 2015). By identifying if nursing faculty suffer from IP and how IP effects teaching abilities, recommendations can be formulated concerning coping mechanisms and resources that could support faculty struggling with this phenomenon. These recommendations can lead to improved interactions with peers, students, and superiors; improved teaching outcomes; and increased scholarly service (Hutchins, 2015). These improvements offer positive outcomes for faculty members, institutions, and nursing students.

This quantitative study was conducted to determine if nursing faculty suffer from feelings of IP and to what extent these feeling affect their teaching and scholarship. The purpose of this study was to determine whether there is a difference in the intensity of feelings of IP among undergraduate-level faculty versus graduate-level faculty.

Relevant Scholarship

IP has been documented in numerous professions including health care and higher education (Parkman, 2016). Focusing on IP within the academic setting, the emphasis is determining faculty feelings of IP and the impact those feelings have on professional success (Hutchins et al., 2018). IP is more often seen in people with advanced degrees

who aspire to perfectionism (Parkman, 2016). Many teaching institutions require nursing faculty to have an advanced degree to move from undergraduate to graduate teaching status. As faculty move from teaching at the undergraduate level to teaching at the graduate level, the expectation to complete research may become a more essential requirement. In academia, the competition for research funding may heighten feelings of IP (Hutchins, 2015). Role changes such as moving from undergraduate faculty to graduate faculty may also be relevant to feelings of IP (Hutchins & Rainbolt, 2016). Working in the competitive climate of academia can exacerbate IP among both undergraduate and graduate faculty (Hutchins & Rainbolt, 2016). Research also shows that career status and position may impact imposter thoughts and feelings (Hutchins et al., 2018). Research data concerning college faculty and IP are limited with no research noted concerning nursing faculty feelings of IP or how IP affects undergraduate or graduate level faculty.

Research Question

What is the difference in levels of IP among nursing faculty who teach at the graduate level compared to nursing faculty who teach at the undergraduate level?

Research Design

The nature of this study was a quantitative comparative analysis, using a survey strategy, to examine the difference in levels of IP symptoms among nursing faculty who teach at the undergraduate level compared to faculty who teach at the graduate level. I examined the interconnection of IP and nursing faculty as well as the relationship between teaching level and IP. The results may help nursing faculty and administrators

identify factors that cause increased feelings of IP in undergraduate and graduate level faculty and develop strategies and resources to combat IP in nursing faculty at large. Finding ways to decrease IP feelings may lead to more engaged faculty and better outcomes for students, nursing departments, and institutions.

Methods

Population, Sample, and Power

The target population was nursing faculty members who are didactic instructors teaching in prelicensure nursing programs that confer an associate or baccalaureate degree and faculty who teach the didactic portion of postgraduate and graduate programs. Goal-directed sampling was used to guarantee an adequate sample size. Inclusion criteria for the study were nursing faculty who teach the didactic portion of any level of nursing education. Nursing faculty who teach solely in the clinical arena or simulation lab were excluded from the study.

Using G*Power (Faul et al., 2020), I conducted a power analysis using a two-tailed independent t test to determine the sample size required to achieve a power level of 0.8 with a level of significance, alpha (α) at .05. The use of an alpha (α) value of .05 allowed for decreased risk of Type I error (Warner, 2013). A medium effect size of 0.5 was used to calculate a total sample size of 128, or 64 participants in each group.

Variables/Sources of Data

A comparative analysis details how data compare to one another and explains how variables relate to one another (Grove et al., 2016). For this study, the independent variable was faculty teaching level. The dependent variable was faculty feelings of IP.

I collected data using email and social media platforms to recruit potential participants. A survey link was created to summarize the purpose and significance of the study and how the data would be used. Potential participants were asked if they taught in the classroom setting as a full-time instructor to ensure purposeful sampling. A recruitment disclaimer was included in the survey link stating the purpose and significance of the study, how the collected data would be used, and that participation in the research study was voluntary and confidential. General demographic information (see Appendix A) included age, gender, years of didactic teaching experience, level of education, what level participant was currently teaching (undergraduate or graduate), and any other types of nursing programs that participants have taught in the past.

Instrumentation or Measures

I collected data using the Clance impostor phenomenon scale (CIPS) developed by Clance (1986). The CIPS is a 20-item instrument that acknowledges the fear of evaluation and feeling less capable than peers and is positively worded to minimize social desirability effects (Mak et al., 2019, p. 2). The CIPS was created to help individuals determine if they have IP and to what extent IP interferes in their life. Questions are measured on a 5-point Likert scale: 1 = *not at all true*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, and 5 = *very true*. Numbers for each question are added together for a total score. A score of 40 or less shows few feelings of IP, 41–60 shows moderate IP feelings, 61–80 shows frequent feelings of IP, and greater than 80 shows intense and frequent feelings of IP. Higher scores reflect that IP has a higher effect on an individuals' life. I received permission to use the CIPS from Clance (see Appendix B). CIPS is the most frequently

used measure by researchers for determining IP and has resulted in the best statistical analysis of IP compared to other IP measurement tools (Mak et al., 2019).

Design and Analysis

I collected data using Survey Monkey and disseminated the data to IBM Statistical Package for Social Sciences (SPSS) Version 25.0 software for data analysis. The following research question and hypotheses were used to manage the study:

RQ: What is the difference in levels of IP among nursing faculty who teach at the graduate level compared to nursing faculty who teach at the undergraduate level?

H_0: There is no difference in levels of IP among nursing faculty who teach at the graduate level compared to nursing faculty who teach at the undergraduate level.

H_a: There is a difference in levels of IP among nursing faculty who teach at the graduate level compared to nursing faculty who teach at the undergraduate level.

I examined data from the CIPS and demographic information for any missing information.

The CIPS is a 5-point Likert type scale; therefore, the data can be categorized as interval for level of measurement (Warner, 2013). Five-point rating scales provide adequate sensitivity and ensure that outcome variables are normally distributed (Creswell & Creswell, 2017). Statistics were calculated using a two-tailed independent t test for parametric statistical analysis. The t test is a suitable statistical choice when the dependent variable is measured on an interval scale and when the independent variable consists of two categorical, independent groups (Warner, 2013).

Results

After receiving Walden University Institutional Review Board approval (#07-05-22-0671594), I sent 100 e-mails to nursing faculty at 20 different colleges in the eastern United Sates. I also recruited participants through social media posts and a SurveyMonkey link. The total sample consisted of 178 respondents. Ten respondents did not meet the inclusion criteria of teaching in the classroom setting, and four respondents did not complete the CIPS questionnaire. The final sample size of 164 participants was used for data analysis. The sample size for faculty teaching at the graduate level was n = 18, and the sample size for faculty teaching at the undergraduate level was n = 146.

The total sample size was 178 respondents with 164 meeting criteria for inclusion in the study. This was a larger sample than was needed for a medium effect size of 0.5, which was calculated as a total sample size of 128, or 64 participants in each group. In the sample, 146 participants taught entry-level nursing courses (students pursuing associate degrees and bachelor of science degrees), and 18 participants taught postgraduate- and graduate-level courses (Table 1).

Table 1

Teaching Level

	N	Percent	Mean	Std. deviation
Entry level	146	89	60.32	15.606
Postgrad/graduate	18	11	53.83	11.967

Analysis

I conducted a two-tailed *t*-test analysis to establish if there was a significant difference in feelings of IP in undergraduate-level nursing instructors compared to postgraduate- and graduate-level instructors (Table 2).

Table 1

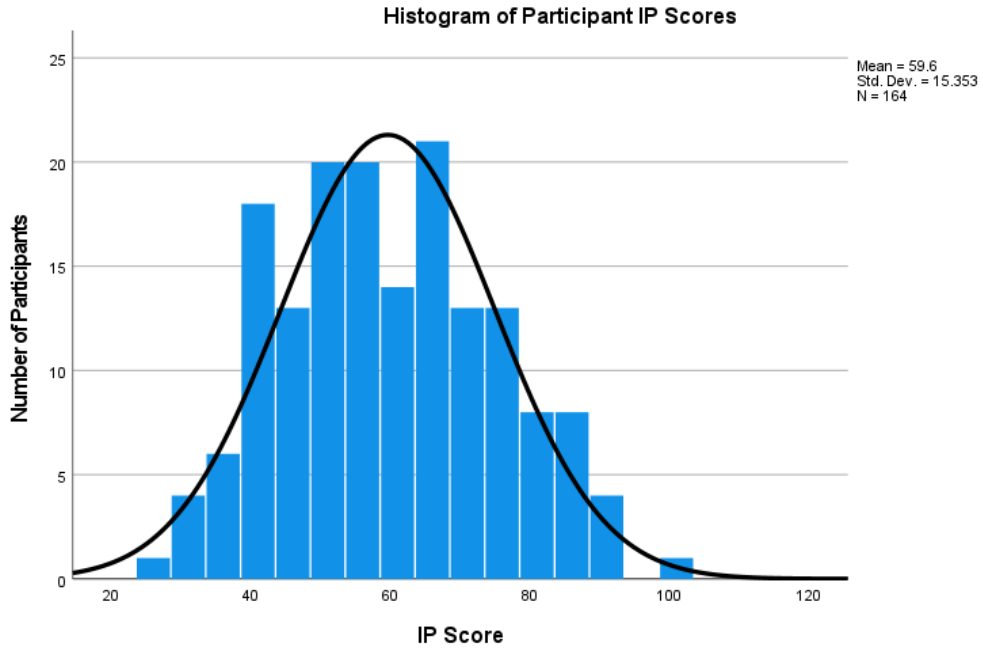
Analysis for IP by Teaching Level, t-test

IP						95%	Confidence
	t	df	Sig	Mean	Std err	Lower	Upper
	2.089	24.748	.047	6.482	3.102	.089	12.874

Assumptions for the independent *t*-test include that the dependent variable should be measured on a continuous scale. The CIPS is a 5-point Likert type scale; therefore, the data can be categorized as interval for level of measurement (Warner, 2013). Five-point rating scales provide adequate sensitivity and ensure that outcome variables are normally distributed (Creswell & Creswell, 2017). The *t* test is a suitable statistical choice when the dependent variable is measured on an interval scale and when the independent variable consists of two categorical, independent groups (Warner, 2013). Assumption 2 is that the independent variable must consist of two categorical groups independent of each other and independence of observations. I had two groups of faculty who either taught at the graduate or the undergraduate level. The next assumption is that there should be no significant outliers. I created a histogram to provide visual representation of distribution of data and to show any outliers or gaps in the data (Figure 1). The histogram had a symmetric distribution with no significant outliers noted.

Figure 1

Histogram of Participants IP Scores



Assumption 4 postulates that the dependent variable should be approximately normally distributed for each group of the independent variable. Differences in sample size between the two groups of participants were significant; therefore, I conducted a Shapiro-Wilk test. The Shapiro-Wilk test is frequently used to help determine if there is significant varying distribution of data (Warner, 2013). Statistical analysis showed a *p*-value <0.05 ($p = .001$), showing the sample has not been generated from a normal distribution of undergraduate- and graduate-level instructors. The results deviate from the assumption, which may make my *t*- test analysis less valid (Mishra et al., 2019). Although the *t* test is robust for testing independent variables even with non-normality

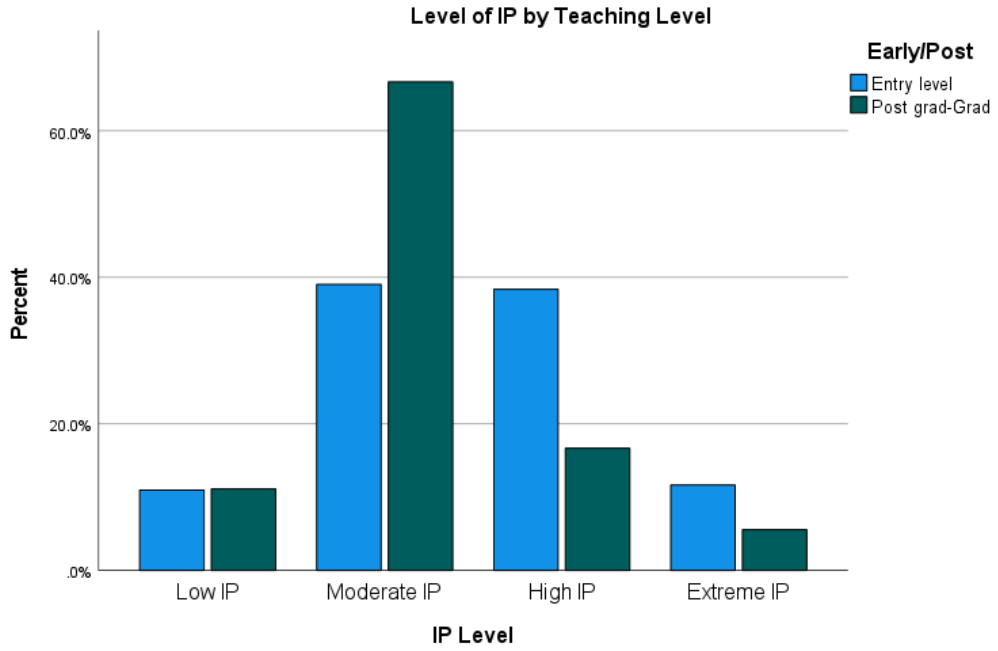
(Fargerland et al. 2011), I interpreted the data with caution. The large sample size may have affected the variation in data.

The final assumption is homogeneity of variance between the two groups of nursing faculty. I conducted a Levene's test of variance which showed a significant difference between variances with *p*-value <0.05 (p = 0.049). This shows homogeneity of variance was not met and there is significant difference between the groups. The significance in variance was 0.001, which is extremely low, and the *t* -test is fairly resistant to violation of the equal variance assumption (Warner, 2013). However, data will need to be interpreted thoughtfully. The difference in sample size of the independent variables may have been a factor in the variation of the data.

Results of the two-tailed *t*-test showed that the feeling of IP differed between nursing instructors that teach at the entry level (M = 60.32, SD = 15.606, n = 146) and instructors teaching at the post-graduate/graduate level (M = 53.83, SD = 11.967, n = 18). These results were statistically significant at the .05 level (*t* = 2.09, df = 24.75. *p* = 0.047). Cohen's d analysis showed small effect size (d = 0.485). This indicates limited practical application of the data. Although the null hypothesis is rejected, the possibility of a Type 1 error cannot be ruled out. Figure 2 shows the graphed interpretation of Levels of IP in entry level instructors compared to post-graduate instructors.

Figure 2

Level of IP by Teaching Level



Discussion

Although faculty are seen as highly experienced and knowledgeable, they may experience emotions of fraudulence known as impostor phenomenon (IP) at any teaching level (Day-Calder, 2017). Understanding if nursing instructors at undergraduate and graduate level feel the effects of IP and what level of IP is most common (low, moderate, high, extreme), can provide understanding of how IP effects nursing faculty.

Interpretation

There was a statistical difference between IP in nursing faculty who teach at the graduate level compared to nursing faculty who teach at the undergraduate level. My data

suggest both undergraduate and graduate level instructors have feelings of IP; however, entry level instructors have increased levels of high and extreme levels of IP than their counterparts teaching at the graduate level. Weiner (1985) noted that individuals who feel imposter thoughts have distinctive attributions regarding how they explain positive and negative events. No research concerning differences in levels of IP in faculty teaching undergraduate level courses versus graduate level courses was found in the literature. The results of my study appear to be the first comparing IP in this context.

Limitations

The sample size was adequate for this study with 164 participants, however, there was an uneven split between faculty teaching at the graduate level (n=18) compared to faculty teaching at the undergraduate level (n=146). According to the American Association of Colleges of Nursing (2023), there are approximately 2,600 undergraduate level nursing programs and 594 institutions offering graduate level nursing degrees, which leads to approximately 4 times more instructors that are teaching undergraduate versus graduate level nursing courses. Inequality in the number of group members could decrease the strength of my findings and lead to either a Type 1 or Type 2 error (Frankfort-Nachmias & Leon-Guerrero, 2018). Generalizability in quantitative research refers to the extent to which we can generalize the findings from a sample to an entire population (Creswell & Creswell, 2018). Considering generalizability, all participants were NCLEX prepared nursing instructors teaching in the classroom. This would be representative of nursing instructors in higher education. However, not all instructors

have the same work experiences and training program which may affect their feelings of IP.

Implications

My results have potential significance to the nursing profession and society at large. My study shows that nursing instructors are affected by IP to varying degrees. By using Weiner's attribution theory, I was able to identify that IP can lead to negative emotions and low achievement performance. Informing instructors that IP is a true phenomenon, provides a foundation for additional research to develop strategies and interventions to combat feelings of IP and decrease adverse responses.

By resisting IP feelings, faculty can teach with enhanced expertise and create an accessible learning environment for students (Labrague et al., 2019). A learning environment rich in effective communication, openness, and clinical proficiency will help effect positive social change by producing highly capable graduate nurses. Graduate nurses have the opportunity to improve patient, family, and societal outcomes and implement healthcare options to decrease societal burdens for patients and families that experience non-optimal healthcare consequences.

Recommendations

Future studies may be focused on collecting a more varied group of nursing instructors by seeking participants from across the country to get a more robust population. Further research may also be directed at each teaching level individually to determine how different levels of IP (low, moderate, high, and extreme) affect teaching outcomes for both undergraduate and graduate level instructors. Another

recommendation would be to look at ways to combat the effects of IP, as it is noted that many nursing instructors experience some level of IP.

Conclusion

Nursing faculty who teach in both undergraduate and post-graduate/graduate levels participated in a study to determine if they had feelings of IP as determined by the CIPS questionnaire. A two tailed *t*-test was completed to determine if there was a difference in IP for undergraduate instructors versus graduate instructors. There was significant difference in IP with undergraduate level instructors having higher levels of IP than instructors at the graduate level. However, both undergraduate and graduate level instructors had feelings of IP at some level. Further research is needed to see what specific levels of IP nursing instructors are experiencing and how the effects of IP can be minimized to provide confident nursing instructors.

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Manuscript 2: Teaching Experience and Feelings of Impostor Phenomenon

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Outlet for Manuscript

The peer-reviewed, scholarly journal for submission of this manuscript is *Nurse Education in Practice.* This journal's target audience is nurse educators and nurse midwives in practice. Topics accepted for submission include original research, systematic reviews, and discussion papers on research in nursing education, and clinical related education for nurses and nurse midwives. This journal aligns with the manuscript content as IP affects nursing education, and this will be original research.

Nurse Education in Practice utilizes an online submission and review system for manuscript selection. There are no formal requirements on manuscript formatting at submission. Original research should not exceed 5000 words, including abstract and references. Abstracts are limited to 400 words. Abstracts should include 4-10 keywords that are Medical Subject Heading (MeSH) terms. The main manuscript should include the following structure: Abstract; Introduction; Methods; Results; Discussion; and Conclusion.

Journal information can be accessed via:

https://www.sciencedirect.com/journal/nurse-education-in-practice

Submission information can be accessed via:

https://www.elsevier.com/journals/nurse-education-in-practice/1471-5953/guide-for-authors

Abstract

For nurse educators, the scope of nursing includes preparing students for nursing practice. Academic nurse educators must be prepared to serve as educators, researchers, and have experience in a clinical specialty. Feelings of Imposter Phenomenon (IP) can lead to faculty deficiencies in interactions with students and lack of scholarly activities. The purpose of this study was to see if less teaching experience causes more intense feelings of IP in nursing faculty. Weiner's attributional theory of motivation and emotion guided the explanation of why faculty may experience imposter feelings. The Clance Imposter Phenomenon Scale (CIPS) was used to collect data. A two tailed *t* test was conducted to compare the difference in feelings of IP for nursing instructors with less than 5 years teaching experience (n = 63) and instructors with 5 or more years teaching experience (n = 101). There was no statistically significant difference in feelings of IP. Future research should focus on ways to combat feelings of IP as this research indicated that many nursing instructors experience IP at some level.

Keywords: nursing, instructors, researchers, clinical

Introduction

The role of a nurse educator is complex. Faculty are expected to be effective educators, researchers, and scholars in academia and still retain the hands-on skills of an expert nurse practitioner (Bono-Neri, 2019). Many faculty spend much of their time in academia feeling that students and peers perceive them as being more competent than they are or feeling like an imposter (Nedegaard, 2016). Research concerning advanced practice nurses and impostor phenomenon (IP) has been published (Ares, 2018; Haney et al., 2018) as well as research on college faculty and IP (Hutchins, 2015; Hutchins & Rainbolt, 2016). However, there is a lack of literature regarding IP and its effects on nursing faculty.

Significance/Importance

Nursing practice is at the center of a dynamic healthcare system, and nurse educators are tasked with preparing students to become professional nurses who can adapt to ever evolving scientific and technological changes (Booth et al., 2016). Faculty who experience feelings of IP believe they have somehow fooled everyone into believing they are more competent than they really are and are unable to attribute their success to their own abilities (Fraenza, 2016). This leads to decreased interactions with students in classroom, clinical, and advisement situations, which may lead to poor student evaluations of teaching effectiveness (Parkman, 2016). IP may also cause the faculty member to avoid extra academic pursuits, such as participating in conferences and research, leading to impaired relationships with peers (Fraenza, 2016). These potential

negative outcomes in scholarship and teaching lay the construct for unpleasant outcomes for faculty members, nursing schools, and institutions (Hutchins, 2015).

The theoretical framework for this study was Weiner's (1980) attributional theory of motivation and emotion. Weiner focused this attribution theory on achievement. Attributions are classified in three causal dimensions: stability, controllability, and locus of control, and Weiner (1980) proposed that causal attributions determine reactions to success and failure. Attribution theory contends that a variety of responses can be achieved by a person's thought processes on how internal and external factors determine success or failure (Weiner, 1985). Given that individuals experiencing IP have distinct attributions concerning how they explain success and failure, Weiner's attribution theory was helpful in explaining factors that may influence faculty's feelings of IP (Hutchins, 2015).

By distinguishing if nursing faculty suffer from IP and how IP affects instructional success, recommendations can be formulated concerning coping mechanisms and resources that support faculty struggling with this phenomenon. Developing resources to combat IP can lead to improved interactions with peers, students, and superiors; improved teaching outcomes; and increased scholarly service (Hutchins, 2015). These improvements offer positive outcomes for faculty members, institutions, and nursing students. The purpose of this study was to determine whether there is a difference in the intensity of feelings of IP among faculty with fewer than 5 years of teaching experience versus faculty with 5 years or more of teaching experience.

Relevant Scholarship

Because education and nursing are two unique disciplines, clinical expertise does not naturally result in teaching expertise, and it can take time for faculty to become self-assured teaching in the classroom (Booth et al., 2016). IP has been documented in numerous professions including health care and higher education (Parkman, 2016). Focusing on IP within the academic setting, the emphasis has been on determining faculty's feelings of IP and the impact they have on professional success (Hutchins et al., 2018). Hutchins (2015) noted that nontenured faculty experience more feelings of IP than their tenured counterparts. Nontenured faculty are novice educators, with fewer years of teaching experience, who are developing their professional identity. Tenured faculty are often in their mid or later career track and considered to have a greater level of expertise than their nontenured counterparts (Hutchins, 2015). Less experienced higher education faculty (Sims & Cassidy, 2018) and librarians (Lacey & Parlette-Stewart, 2017) have been found to have more intense IP feelings than their more experienced colleagues. Research data concerning college faculty and IP are limited with no research concerning nursing faculty feelings of IP or how IP affects novice or experienced nursing instructors.

Research Question

What is the difference in levels of IP in nursing faculty who have fewer than 5 years teaching experience compared to nursing faculty who have more than 5 years teaching experience?

Research Design

The nature of this study was a quantitative comparative analysis, using a survey strategy, to examine the difference in levels of IP in nursing faculty who have fewer than 5 years of experience teaching in the classroom environment compared to faculty who have taught in the classroom for 5 years or more. I examined the interconnection of IP and nursing faculty as well as the relationship between years of teaching experience and IP. The results may help nursing faculty and administrators identify that IP does exist so that strategies may be developed to address IP.

Methods

Population, Sample, and Power

The target population was nursing faculty who are didactic instructors teaching in prelicensure, postgraduate, and graduate programs. Faculty were categorized as *novice instructors* (teaching fewer than 5 years) and *experienced instructors* (teaching 5 years or more) in their current position. Goal-directed sampling was used to guarantee an adequate sample size. Inclusion criteria for the study were nursing faculty who taught the didactic portion of any level of nursing education. Nursing faculty who taught solely in the clinical arena or simulation lab were excluded from the study.

Using G*Power (Faul et al., 2020), I conducted a power analysis using a two-tailed independent *t* test to determine the sample size required to achieve a power level of 0.8 with a level of significance, alpha (α) at .05. The use of an alpha (α) value of .05 allowed for decreased risk of Type I error (Warner, 2013). A medium effect size of 0.5 was used to calculate a total sample size of 128, or 64 participants in each group.

Variables/Sources of Data

A comparative analysis details how data compare to one another and explains how variables relate to one another (Grove et al., 2016). For this study, the independent variable was years of teaching experience. The dependent variable was faculty feelings of IP. I collected data using email and social media platforms to recruit potential participants. A survey link was created to summarize the purpose and significance of the study and how the data would be used. Potential participants were asked if they teach in the classroom setting as a full-time instructor to ensure purposeful sampling. A recruitment disclaimer was included in the survey link stating the purpose and significance of the study, how the collected data would be used, and that participation in the research study was voluntary and confidential. General demographic information (see Appendix A) included age, gender, years of didactic teaching experience, level of education, what level participant was currently teaching (undergraduate or graduate), and any other types of nursing programs that participants have taught in the past.

Instrumentation or Measures

I collected data using the Clance IP scale (CIPS; Clance, 1986). This 20-item instrument acknowledges the fear of evaluation and feeling less capable than peers and is positively worded to minimize social desirability effects (Mak et al., 2019, p. 2). The CIPS was created to help individuals determine if they have IP and to what extent IP interferes in their life. Questions are measured on a 5-point Likert scale: 1 = *not at all true*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, and 5 = *very true*. Numbers are added together for a total score. A score of 40 or less shows few feelings of IP, 41–60 shows moderate IP

feelings, 61–80 shows frequent feelings of IP, and greater than 80 shows intense and frequent feelings of IP. Higher scores reflect that IP has a higher effect on an individual's life. I received permission to use the CIPS from Clance (Appendix B). CIPS is the most frequently used measure by researchers for determining IP and has resulted in the best statistical analysis of IP compared to other IP measurement tools (Mak et al., 2019).

Design and Analysis

I collected data using Survey Monkey and disseminated the data to IBM Statistical Package for Social Sciences (SPSS) Version 25.0 software for data analysis. The following research question and hypotheses were used to manage the study:

RQ: What is the difference in levels of IP in nursing faculty who have fewer than 5 years teaching experience compared to faculty who have 5 years or more teaching experience?

H_0: There is no difference in levels of IP in nursing faculty with fewer than 5 years teaching experience compared to nursing faculty with more than 5 years teaching experience.

H_a: There is a difference in levels of IP in nursing faculty with fewer than 5 years teaching experience compared to nursing faculty with more than 5 years teaching experience.

I examined data from the CIPS and demographic information for any missing information.

The CIPS is a 5-point Likert type scale; therefore, the data can be categorized as interval for level of measurement (Warner, 2013). Five-point rating scales provide

adequate sensitivity and ensure that outcome variables are normally distributed (Creswell & Creswell, 2017). Statistics were calculated using the two-tailed independent *t* test. (Warner, 2013). The test is a suitable statistical choice when the dependent variable is measured on an interval scale and when the independent variable consists of two categorical, independent groups (Warner, 2013).

Results

After receiving Walden University Institutional Review Board approval (#07-05-22-0671594), I sent 100 e-mails to nursing faculty at 20 different colleges in the eastern United Sates and recruited participants through social media posts and a SurveyMonkey link. The total sample consisted of 178 respondents. Ten respondents did not meet the inclusion criteria of teaching in the classroom setting, and four respondents did not complete the CIPS questionnaire. The final sample size of 164 participants was used for data analysis. The sample size for faculty who have been teaching fewer than 5 years was n = 63, and the sample size for faculty teaching 5 years or more was n = 101.

The total sample size was 178 respondents with 164 meeting criteria for inclusion in the study. This was a larger sample than was needed for a medium effect size of 0.5, which was calculated as a total sample size of 128, or 64 participants in each group. In the sample, 63 participants had been teaching for fewer than 5 years and 101 had taught for 5 years or more (Table 3).

Table 2

Teaching Experience

	N	Percent	Mean	Std. deviation
Fewer than 5 years	63	38.4	61.75	14.960
5 years or more	101	61.6	58.27	15.516

Analysis

I conducted a two-tailed t-test analysis to establish if there was a significant difference in feelings of IP among instructors with teaching experience of fewer than 5 years compared to instructors with teaching experience of 5 years or more (Table 4).

Table 3

Analysis for IP by Teaching Experience, t-test

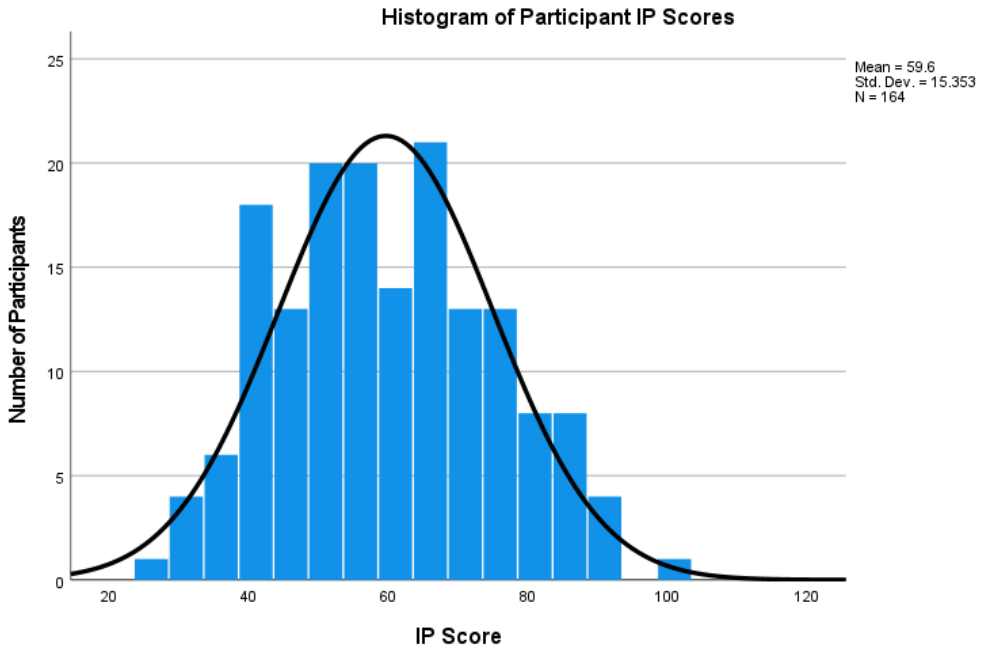
IP						95%	Confidence
	t	df	Sig	Mean	Std err	Lower	Upper
	1.416	162	.159	3.479	2.457	-1.384	8.331

The first statistical assumption for the independent t-test is that there is one dependent variable measured on a continuous scale. The CIPS is a 5-point Likert type scale. It is common to use Likert rating scales for interval levels of measurement (Warner, 2013). Five-point rating scales provide adequate sensitivity and ensure that outcome variables are normally distributed (Creswell & Creswell, 2017). The second assumption is there is one independent variable that has two categorical, independent groups. I had two groups of faculty: those who taught for fewer than 5 years and those who taught for 5 years or greater. The t test is a suitable statistical choice when the dependent variable is measured on an interval scale and when the independent variable

consists of two categorical, independent groups (Warner, 2013). The third assumption is that there should be no significant outliers. A histogram provides visual representation of distribution of values and looks for outliers (Warner, 2013). The histogram had a symmetric distribution with no significant outliers noted (Figure 3).

Figure 3

Histogram of Participants IP Scores



The fourth assumption is that the dependent variable should be distributed normally for each set of the independent variables. Differences in sample size between the two groups of participants were significant; therefore, a Shapiro-Wilk test was completed. The Shapiro-Wilk test is commonly used to determine whether a data set is normally distributed (Warner, 2013). Statistical analysis showed a p-value < 0.5, (p = 0.000) showing the sample was not generated from a normal distribution. Figure 3 shows

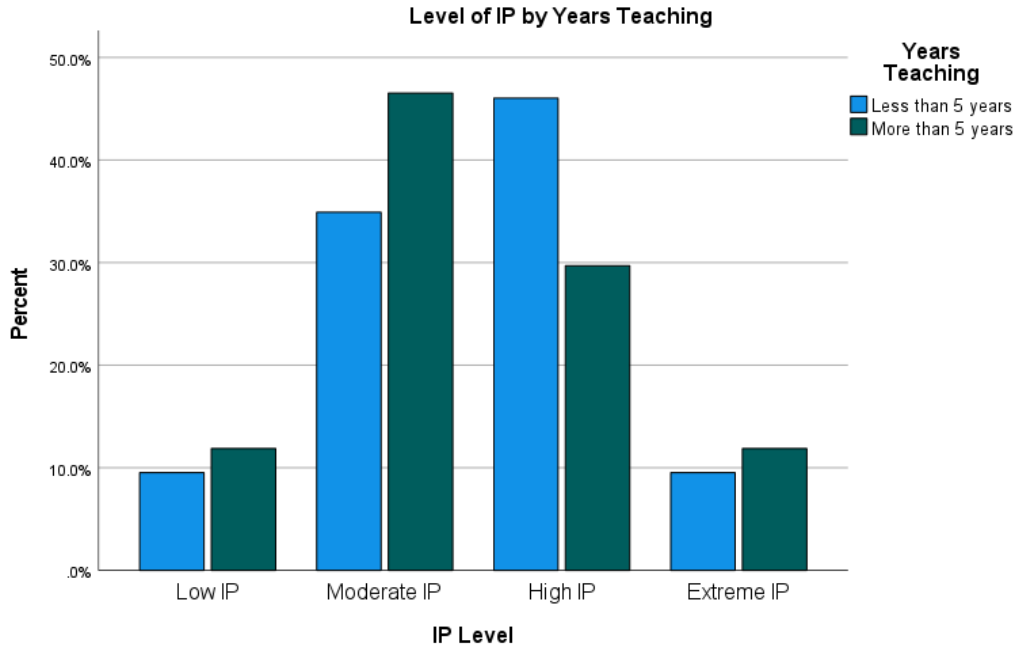
a symmetric distribution. Mishra et al. (2019) noted that with larger sample sizes, violation of normality is not a major concern; however, the significant difference in size between the two independent groups may have caused inconsistent data. The results deviate from the assumption, which may affect the validity of my *t*- test, so I interpreted the data with care.

I conducted a Levene's test of variance to evaluate the fifth assumption of homogeneity of variance. The Levene's test had a *p*-value > .05 ($p = 0.657$), showing the variances are not significantly different from each other and homogeneity of variance is met.

Results of the two-tailed *t*-test showed that the feeling of IP in nursing instructors with less than 5 years teaching experience (M = 61.75, SD = 14.960, n = 63) and instructors with 5 years or more teaching experience (M = 58.27, SD = 15.516, n = 101) was not statistically significant at the .05 level of significance (t = 1.42, df = 162. $p = 0.159$). Therefore, the null hypothesis is retained. Figure 4 shows the graphed interpretation of Levels of IP in instructors teaching less than 5 years compared to instructors teaching 5 years or more.

Figure 4

Level of IP by Years Teaching



Discussion

Nursing faculty are comprised of instructors with varying years of nursing experience and teaching experience. It can take time to become a self-assured didactic instructor (Booth et al., 2016). Novice educators, with less than 5 years of teaching experience, are acquiring their professional identity whereas more seasoned faculty are often considered to have a greater level of expertise (Hutchins, 2015). Exploring whether IP affects novice and experienced nursing faculty and to what degree, can help to find ways to combat the impact of IP.

Interpretation

The analysis noted there was no significant difference in levels of IP in nursing faculty who have taught for less than 5 years compared to faculty who have taught 5 years or more. Although, other studies of IP and nursing faculty are limited, when researching feelings of IP in college librarians, Clark et al. (2014) found that librarians with 3 years or less experience had higher IP scores than their experienced counterparts. Hutchins (2015) found that non-tenured faculty have more extreme imposter thoughts than tenured faculty who tend to have more extensive teaching experience. While my findings did not correlate with the results found by Clark or Hutchins, I did discover that faculty with less than 5 years of teaching experience had higher levels of "high" IP than their peers with 5 years or more of experience. Further studies may be beneficial to substantiate my results.

Limitations

The study had 164 participants, which was a sufficient sample size; however, only 38% of the participants had been teaching less than 5 years (n = 63) compared to 62% teaching 5 years or more (n = 101). Inequality in the number of group members could decrease the strength of my findings and lead to either a Type 1 or Type 2 error (Frankfort-Nachmias & Leon-Guerrero, 2018). Searches were completed via AACN, NLN, NACNEP and other workforce websites and no information was found concerning how many inexperienced versus experienced nursing instructors are in academia at this time. The lack of information affects the generalizability of the study because I was not

able to distinguish if the difference in participant percentages is congruent with the actual percentages in the academic setting.

Implications

Effective nursing faculty must be confident in the classroom and clinical setting (Booth et al., 2016). Although, not statistically significant, the study does have implications for nursing faculty. Statistics showed that nursing instructors, regardless of teaching experience, are affected by varying degrees of IP. Weiner's attributional theory was the guiding framework for my research. Attributional theory explains that elevated IP causes attribution of success to luck rather than ability (Vaughn, et al., 2019). Advising instructors that feelings of IP are real provides a foundation for further research to find what may cause different levels of IP (low, moderate, high, extreme) and how to decrease or resist these feelings.

By identifying and reducing faculty feelings of IP expertise in the didactic and clinical settings, accessibility, and the ability to form interpersonal relationships with students and colleagues can flourish (Labrague et al., 2019). Nursing instructors who are approachable, organized, and professionals in the field of nursing can provide the atmosphere that will help produce positive social change. By creating highly proficient graduate nurses, healthcare can improve outcomes for patients, families, communities, and society. Well-educated nurses will also improve patient outcomes and decrease societal burdens for patients with poor outcomes.

Recommendations

Further research may concentrate on the specific levels of IP (low, moderate, high, and extreme) that nursing instructors experience to determine how each level affects instructors' interactions and teaching abilities. Another recommendation would be to look at ways to fight feelings of IP, as it is noted that many nursing instructors experience some level of IP. Finally, having a more vigorous sample of instructors from differing areas of the country may yield differing results.

Conclusion

Nursing faculty years of teaching experience was used to determine feelings of IP. Didactic instructors with less than five years teaching experience and their colleagues with 5 years or more experience completed the CIPS questionnaire to determine if they had feelings of IP. I conducted a two tailed t-test to compare feelings of IP for both groups of nursing instructors. No significant difference in IP feelings was noted between instructors with less than 5 years teaching experience and instructors with 5 or greater years of teaching experience. The CIPS questionnaire showed that both groups of nursing instructors had some feelings of IP. Further research is needed to see what may cause specific levels of IP in nursing instructors. Research on how to reduce feelings of IP is also needed to provide competent, expert nursing institution.

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Manuscript 3: Gender and Feelings of Impostor Phenomenon in Nursing Faculty

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Outlet for Manuscript

The peer-reviewed, scholarly journal for submission of this manuscript is *Nurse Education Today* . This journal's target audience is educationalists in nursing and interprofessional health care. Topics accepted for submission include contemporary issues within nursing education, current research within nursing education, or essays reviewing works from the arts, sciences, or humanities that have influenced your practice as a nurse, educator, or academic. This journal aligns with the manuscript content as IP affects faculty development and scholarship.

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Abstract

Nursing faculty play a crucial role in the achievement of nursing students' learning outcomes and critical thinking required for professional practice. Faculty must be effective educators, clinical experts and working scholars. Feelings of Imposter Phenomenon (IP), self-doubt of intellect, skills, or accomplishments, can lead to faculty feeling incompetent as educators and scholars. The purpose of this study, using Weiner's attributional theory, is to explore if female nursing faculty have more intense feelings of IP then male nursing faculty. Data were collected using the Clance Imposter Phenomenon Scale (CIPS). A two tailed *t* test was completed to evaluate feelings of IP in male nursing instructors (n = 7) and female nursing instructors (n = 157). The difference in feelings of IP among male and female instructors was not statistically significant. The research did show that both male and female nursing instructors have feelings of IP. Future research may focus on how male instructors react to IP compared to female instructors and on ways to combat IP.

Keywords: nursing, faculty, scholars, clinical experts

Introduction

Nursing faculty possess skills, knowledge, and expertise that allow effective teaching to take place (Labrague et al., 2019). Still, some individuals may feel inadequate in the role of expert and fear being found out as a fake or as someone who does not deserve their status or reputation. This is considered *imposter phenomenon* (IP; Badawy et al., 2018). Research concerning the nursing profession and IP has focused on nursing students (Aubeeluck et al., 2016; Christensen et al., 2016) and nurse leaders (Ares, 2018; Haney et al., 2018). Research on IP and college faculty is sparse, and there is a significant lack of literature concerning IP and its effects on nursing faculty.

Significance/Importance

Nursing faculty have an important role of ensuring nursing students are adequately supported in the didactic and clinical areas to promote effective learning and critical thinking (Jack & Hamshire, 2019). When faculty have feelings of IP, they feel uncertain about their professional or academic success and attribute attainment to other factors (Rohrmann et al., 2016). This may cause the faculty member to be uncomfortable in the didactic setting, leading to decreased interactions with students in the classroom (Parkman, 2016). Scholarship may also be affected as research opportunities and other academic pursuits are wasted due to fear of being exposed as a fraud (Parkman, 2016). These potential negative outcomes in scholarship and teaching lay the construct for unpleasant outcomes for the faculty member, the school of nursing, and the institution (Hutchins, 2015).

The theoretical framework for this study was Weiner's (1985) attributional theory of motivation and emotion. Attributions are personal perceptions about causes of success or failure that tend to affect motivation in various ways (Weiner, 2005). Attribution theory is used to look at how people make cause-and-effect inferences of their achievements and failures to achieve control in their environment (Weiner, 2005). Attribution theory suggests that personal perception of causality, or judgment of why a particular incident occurred, will influence interacting factors causing a variety of responses (Weiner, 1985). Given that individuals experiencing IP have distinct attributions concerning how they explain positive and negative events, using Weiner's attribution theory is helpful in explaining the way in which faculty may experience IP (Hutchins, 2015).

By identifying if nursing faculty suffer from IP and how IP affects academic endeavors, processes can be devised to develop methods and provide resources to support faculty struggling with this phenomenon. This can lead to improved interactions with peers, students, and superiors; improved teaching outcomes; and increased scholarly service (Hutchins, 2015). These improvements offer positive outcomes for faculty members, institutions, and nursing students. The purpose of this study was to determine whether there is a difference in the intensity of feelings of IP among female nursing faculty versus male nursing faculty.

Relevant Scholarship

IP has been documented in numerous professions including many areas of health care, such as surgeons (Leach et al., 2019), medical students and nursing students

(Gallagher, 2019), and clinical nurse specialists (Ares, 2018; Haney et al., 2018). Focusing on IP within the academic setting, the emphasis is determining faculty's feelings of IP and the impact they have on professional success (Hutchins et al., 2018). In professions where one gender is dominant, such as nursing, individuals of the opposite sex are more likely to demonstrate behaviors congruent with IP (Parkman, 2016). A study of new music education faculty found that female faculty had more intense feelings of IP than their male counterparts did (Sims & Cassidy, 2018). Results from another study showed that male students had less extreme IP feelings than female students did (Patzak et al., 2017). However, when comparing male versus female general surgeons for signs of burnout and feelings of IP, no clinical significance was noted in IP scores (Leach et al., 2019). Also, among men and women in the field of information technology, data showed no significance difference in levels of IP by gender (Mclean & Avella, 2016). Research data concerning college faculty and IP are limited, with no research noted concerning nursing faculty feelings of IP or how IP affects female or male nursing faculty.

Research Question

What is the difference in levels of IP among female nursing faculty compared to male nursing faculty?

Research Design

The nature of this study was a quantitative comparative analysis, using a survey strategy, to examine the difference in levels of IP in female nursing faculty compared to their male counterparts. In this study, I specifically examined the difference in feelings of IP among female nursing instructors and male nursing instructors. The results may help

nursing faculty and administrators identify the differences of feeling of IP between male and female faculty members, which will provide more information to base strategies on to help faculty who have IP.

Methods

Population, Sample, and Power

The target population was nursing faculty who are didactic instructors teaching in prelicensure, postgraduate, and graduate nursing programs. Gender at birth was the determination of gender for this study. Goal-directed sampling was used to guarantee an adequate sample size. Inclusion criteria for the study were nursing faculty who taught the didactic portion of any level of nursing education. Nursing faculty who taught solely in the clinical arena or simulation lab were excluded from the study.

Using G*Power (Faul et al., 2020), I conducted a power analysis using a two-tailed independent *t* test to determine the sample size required to achieve a power level of 0.8 with a level of significance, alpha (α) at .05. The use of an alpha (α) value of .05 allows for decreased risk of Type I error (Warner, 2013). A medium effect size of 0.5 was used to calculate a total sample size of 128, or 64 participants in each group.

Variables/Sources of Data

A comparative analysis details how data compare to one another and explains how variables relate to one another (Grove et al., 2016). For this study, the independent variable was faculty gender. The dependent variable was faculty feelings of IP.

I collected data using email and social media platforms to recruit potential participants. A survey link was created to summarize the purpose and significance of the

study and how the data would be used. Potential participants were asked if they teach in the classroom setting as a full-time instructor to ensure purposeful sampling. A recruitment disclaimer was included in the survey link stating the purpose and significance of the study, how the collected data would be used, and that participation in the research study would be voluntary and confidential. General demographic information (see Appendix A) included age, gender, years of didactic teaching experience, level of education, what level participant was currently teaching (undergraduate or graduate), and any other types of nursing programs that participants have taught in the past.

Instrumentation or Measures

I collected data using the Clance IP scale (CIPS; Clance, 1986). This 20-item instrument acknowledges the fear of evaluation and feeling less capable than peers and is positively worded to minimize social desirability effects (Mak et al., 2019, p. 2). The CIPS was created to help individuals determine if they have IP and to what extent IP interferes in their life. Questions are measured on a 5-point Likert scale: 1 = *not at all true*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, and 5 = *very true*. Numbers are added together for a total score. A score of 40 or less shows few feelings of IP, 41–60 shows moderate IP feelings, 61–80 shows frequent feelings of IP, and greater than 80 shows intense and frequent feelings of IP. Higher scores reflect that IP has a higher effect on an individual's life. I received permission to use the CIPS from Clance (see Appendix B). CIPS is the most frequently used measure by researchers for determining IP and has resulted in the best statistical analysis of IP compared to other IP measurement tools (Mak et al., 2019).

Design and Analysis

I collected data using Survey Monkey and disseminated the data to IBM Statistical Package for Social Sciences (SPSS) 25.0 software for data analysis. The following research question and hypotheses were used to manage the study:

RQ: What is the difference in levels of IP among female nursing faculty compared to male nursing faculty?

H_0: There is no difference in levels of IP among female nursing faculty compared to male nursing faculty.

H_a: There is a difference in levels of IP among female nursing faculty compared to male nursing faculty.

I examined data from the CIPS and demographic information were examined for any missing information.

The CIPS is a 5-point Likert type scale; therefore, the data can be categorized as interval for level of measurement (Warner, 2013). Five-point rating scales provide adequate sensitivity and ensure that outcome variables are normally distributed (Creswell & Creswell, 2017). Statistics were calculated using a two-tailed independent *t* test for parametric statistical analysis. The *t* test is a suitable statistical choice when the dependent variable is measured on an interval scale and when the independent variable consists of two categorical, independent groups (Warner, 2013).

Results

After receiving Walden University Institutional Review Board approval (#07-05-22-0671594), I sent 100 e-mails to nursing faculty at 20 different colleges in the eastern

United Sates. I also recruited participants through social media posts and a SurveyMonkey link. The total sample consisted of 178 respondents. Ten respondents did not meet the inclusion criteria of teaching in the classroom setting, and four respondents did not complete the CIPS questionnaire. The final sample size of 164 participants was used for data analysis. The sample size for male faculty was $n = 7$, and the sample size for female faculty was $n = 157$.

The total sample size was 178 respondents with 164 meeting criteria for inclusion in the study. This was a larger sample than was needed for a medium effect size of 0.5, which was calculated as a total sample size of 128, or 64 participants in each group. In the sample, seven participants were male and 157 were female (Table 5).

Table 4

Gender At Birth

	N	Percent	Mean	Std. deviation
Male	7	4.3	53.00	17.521
Female	157	95.7	59.90	15.246

Analysis

I conducted a two-tailed *t*-test analysis to establish if there was a significant difference in feelings of IP among male instructors versus female instructors (Table 6).

Table 5

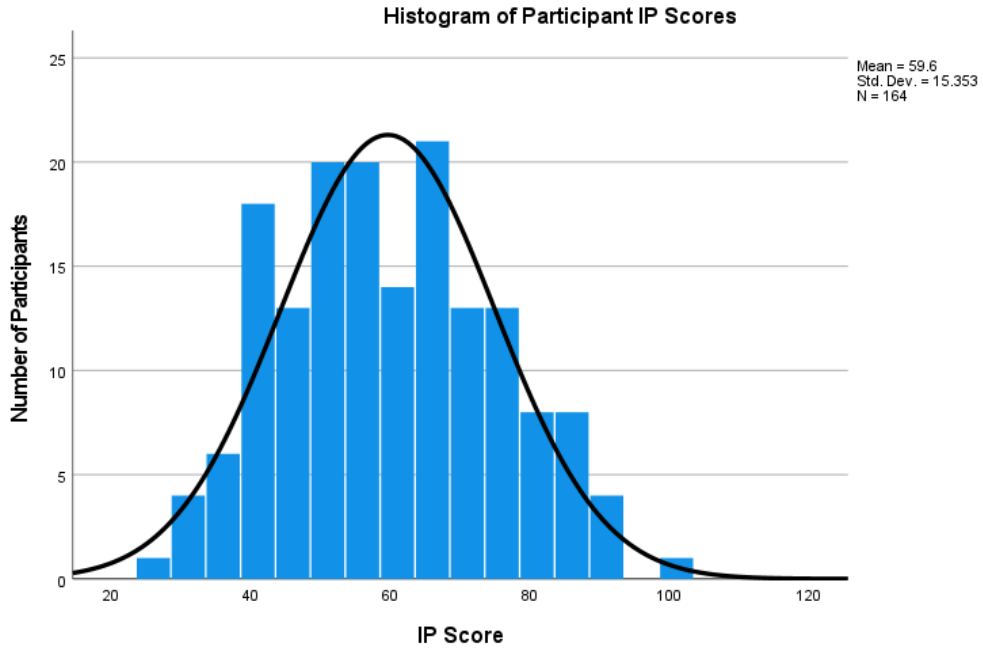
Analysis for IP by Gender, t-test

IP						95%	Confidence
	t	df	Sig	Mean	Std err	Lower	Upper
	-1.164	162	.246	-6.898	5.924	-18.597	4.801

The first assumption for the independent t-test is that the dependent variable should be measured on a continuous scale. The CIPS is a 5-point Likert type scale; therefore, the data can be categorized as interval for level of measurement (Warner, 2013). Likert scales help reduce bias and ambiguity by offering a range of choices (Creswell & Creswell, 2017). The second assumption is that there is one independent variable that consists of two categorical groups independent of each other and not influenced by the other. I had two groups of faculty: male and female. The t-test is a suitable statistical choice when there is one dependent variable measured on an interval scale and when there is one independent, categorical variable that has two independent groups (Warner, 2013). The third assumption is that there should be no significant outliers. I created a histogram to provide visual representation of distribution of data and show any outliers or gaps in the data (Figure 5). A histogram is a graphical presentation representing distribution of data and detecting any unusual observations (Warner, 2013). The histogram was symmetric, and no significant outliers were observed (Figure 5).

Figure 5

Histogram of Participants IP Scores



The fourth assumption is normality; data for each group should be approximately normally distributed. Differences in sample size between the two groups of participants were significant; therefore, I conducted a Shapiro-Wilk test. The Shapiro-Wilk test is frequently used to evaluate if data from a sample is normally distributed (Warner, 2013). Statistical analysis showed a *p*-value >0.05 ($p = 0.294$ for male participants), showing a normal distribution of male participants. However, the female participants had a *p*–value < 0.5 (0.000), indicating a non-normal distribution of female participants.

I looked at skewness and kurtosis to further evaluate the distribution of female participants. Skewness measures the asymmetry of the distribution and kurtosis looks for the significance outliers relative to normal distribution (Warner, 2013). The skewness

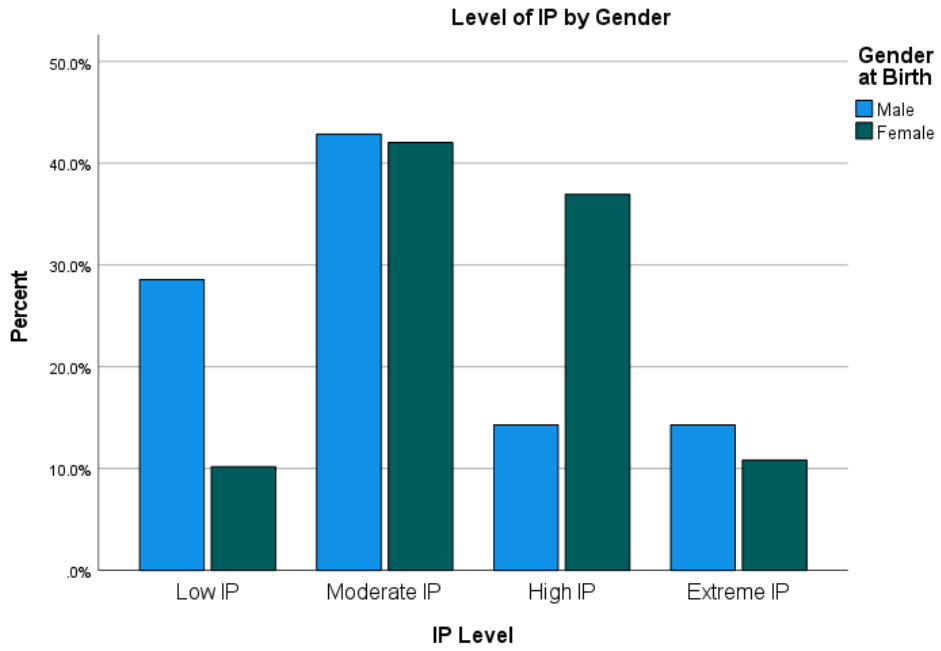
was .09, which indicates a moderate right-skewed distribution. Kurtosis was K = -.49, suggesting negligible outliers. Warner (2013) noted that positively skewed distributions are common. According to Mishra et al. (2019), the *t*-test is still robust when data are mildly skewed and light tailed. I still interpreted the data with vigilance as the size difference in the independent groups was significant enough to cause a Type I error.

The fifth assumption is homogeneity of variance between the two groups of the independent variable. A Levene's test was completed with a *p*-value > .05 ($p = 0.828$), indicating the variances are not significantly different from each other and homogeneity of variance is met.

Results of the two-tailed *t*-test showed that the feeling of IP in male nursing instructors (M = 53, SD = 17.521, n = 7) and female nursing instructors or more (M = 59.90, SD = 15.246, n = 157) was not statistically significant at the .05 level of significance (t = -1.164, df = 162. $p = 0.246$). Figure 6 shows the graphed interpretation of Levels of IP in male instructors compared to female instructors. The null hypothesis is retained.

Figure 6

Level of IP by Gender



Discussion

Although the majority of nursing faculty are still women, the number of male nursing instructors continues to grow. Parkman (2016), noted that in professions where one gender is dominant, individuals of the opposite sex are more likely to demonstrate behaviors associated with IP. Discovering if male and female nursing faculty are affected by IP and to what degree, can provide information on how IP effects nursing instruction.

Interpretation

Mclean and Avella (2016) noted that there was no significant difference in feelings of IP among male and female information technology professionals and Cokley et al. (2015), found no substantial difference in IP among male and female university

students, thus supporting the research outcomes of my study. However, both studies also had disparity in sample size with Mclean having more male participants and Cokley having more female participants. Two studies of undergraduate students completed by Badawy et al. (2018) indicated that females reported stronger IP feelings than males. A study of new music education faculty found that female faculty had more intense feelings of IP then their male counterparts (Sims & Cassidy, 2018). My results did not support the two Badawy or Sims & Cassidy studies , but I did find that male nursing faculty tend to have lower IP feelings than female nursing faculty. The imbalanced sample may also lead to inaccurate data.

Limitations

Although the sample size was adequate for this study, the lack of male respondents (n=7) compared to female respondents (n=157), caused a large gap in the equality of the sample size. The National League for Nursing (NLN) faculty census survey shows that male instructors compose 8.4% of nurse educators while 91.3% of instructors are female (Mazinga, 2022). Only 4.3% of the participants were male (n = 7) while 95.7% were female (n = 157). The lack of male participants could result in a type II error (Frankfort-Nachmias & Leon-Guerrero, 2018). The lack of male respondents and excess of female respondents may also affect generalizability of the findings. The sample percentages are not the same as were found in the literature so the sample may not be indicative of the desired population.

Implications

Nursing educators have a moral, ethical, and legal responsibility to make certain that nursing students provide safe, competent care (Moore, 2020). The feelings of IP for male instructors versus female instructors was not statistically significant. however, it was distinguished that both male and female nursing instructors experience feelings of IP. The implications for nursing faculty focus on levels of IP and their effect on faculty performance in the classroom and in scholarship. I used Weiner's attributional theory as the framework, to explore individuals causality and IP. Past research has a common theme that higher levels of IP attribute success to luck (Vaughn, et.al., 2019). Educating instructors on what IP is and how to recognize different levels of IP (low, moderate, high, extreme) will open the conversation among nursing faculty on ways to stop the negative affects IP can have on successful nursing instruction.

Instructors are crucial sources for foundational knowledge, clinical skill sets, and values that encompass the nursing profession (Padagas, 2020). Feelings of IP hinder faculty's ability to be effective and dynamic instructors in both the didactic and clinical arenas. Acknowledging that IP exists in nursing faculty and finding ways to decrease feelings of IP will allow instructors to perform at their best ability. Nursing instructors who can readily use their skills as effective educators, researchers, and scholarly academics can promote positive social change by providing students with the resources and guidance they need to become skilled graduate nurses. Well-educated nurses will be able to identify and correct societal healthcare disparities and provide optimal care to improve healthcare outcomes for patients, families, and communities.

Recommendations

I would recommend further research to examine how male and female instructors react when facing different levels of IP (low, moderate, high, and extreme). My data showed that both male and female nursing instructors endure feelings of IP so finding reasons why IP occurs and looking at what can be done to decrease IP would be a recommendation for future research. This might be accomplished if a country-wide distribution of the CIPS was completed.

Conclusion

Male and female nursing faculty partook in a research study looking at feelings of IP in nursing faculty. The CIPS questionnaire was completed to see if there was any difference in feelings of IP for male nursing instructors versus female nursing instructors. I found no statistical significance between the two instructor groups; however, both groups did have feelings of IP to some degree. Further research is needed to see if male instructors deal with IP feelings differently than their female counterparts. Research on how to reduce or irradicate IP feelings is also needed so that nursing education maintains high standards of practice and professionalism.

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Part 3: Summary

Integration of the Studies

The purpose of this three-manuscript dissertation was to investigate how feelings of IP might affect nursing faculty. Feelings of IP were explored between nursing instructors teaching at undergraduate level versus those teaching graduate-level coursework, instructors with fewer than 5 years teaching experience compared to instructors with 5 or more years of teaching experience, and male instructors compared to female instructors. I collected data using the CIPS questionnaire (Clance, 1986). This 20-question Likert-scale questionnaire was designed to measure the level of IP (low, moderate, high, extreme). The sample size of 164 instructors teaching in the didactic arena was more than sufficient; however, there were inequalities in the number of participants in each comparative group. Two studies showed no statistical significance, and the other study showed minimal statistical significance; nonetheless, data did show that nursing instructors do have feelings of IP in all comparative groups.

Common Themes/Results

I found that nursing faculty do have feelings of IP in all comparative groups. Of the four levels of IP, moderate feelings were the most noted throughout the studies. No literature involving nursing faculty teaching level and feelings of IP is available to compare the findings of this research; however, studies concerning IP and teaching experience and gender have been conducted.

Comparing IP among instructors teaching at the undergraduate level and those teaching at the graduate level, my study showed a minimal statistical significance (p =

.047) that undergraduate instructors have more intense feelings of IP. No research is available to compare these results. Comparing years of teaching experience, researchers have noted that faculty with less teaching experience have higher IP scores than their more experienced counterparts (Clark et al., 2014; Hutchins, 2015). Results of my study did not show any statistically significant difference when comparing years of teaching experience. I found no significant difference in levels of IP between male and female nursing faculty. Previous studies concerning gender have produced varied outcomes. Several researchers noted no significant difference in feelings of IP related to gender (Cokley et al, 2015; McClean & Avella, 2016), which supports my findings. However, other studies found that women have stronger feelings of IP than their male counterparts (Badawy et al., 2018). Studies have been completed concerning feelings of IP, but research concerning IP and nursing has focused on nursing students (Aubeeluck et al., 2016; Christensen et al., 2016) and nurse leaders (Ares, 2018; Haney et al., 2018). There is a gap in the literature concerning nursing instructors and feelings of IP and how it affects their teaching abilities.

Weiner's (1980) attributional theory of motivation and emotion was the theoretical framework used to guide my study. Using Weiner's (1980) attribution theory is helpful in explaining how faculty may experience IP and how to develop coping skills that may be used to alleviate such thoughts. Findings suggest that nursing faculty do have thoughts of IP at differing levels. Weiner (1980) noted that feelings of shame or guilt can occur when an individual experiences a negative event with an internal or external cause. According to this study, nursing faculty who suffer from feelings of IP are more likely to

experience negative emotions because they continually attribute success to external sources (luck) but fault themselves (internal attribution) for failures. The use of Weiner's theory could be beneficial to future research to determine if nursing instructors can develop effective coping skills to learn how to improve performance attributions.

Significant Change to Discipline and Society

Effective nursing faculty must be confident in the classroom, exhibit clinical expertise, and be productive scholars in nursing research (Booth et al., 2016). By eliminating or reducing nursing faculty's feelings of IP, these characteristics can be developed and enhanced. A learning environment within nursing education that promotes effective and clear communication, approachability, and timely responsiveness will produce highly capable graduate nurses and advanced practice nurses (Nedegaard, 2016). These highly trained providers can effect positive social change by improving patient, family, and societal outcomes and implementing healthcare options to decrease societal burdens for patients and families who experience non-optimal healthcare consequences.

Future Research

My study included participants teaching in the classroom setting in all levels of nursing education. I recommend future research to examine each teaching level individually to determine how different levels of IP affect teaching abilities of both undergraduate- and graduate-level instructors. I found that nursing instructors do have feelings of IP, with many instructors having a moderate level of IP. Further research should examine the specific levels of IP (low, moderate, high, and extreme) that nursing instructors experience to determine how each level affects instructors' interactions and

teaching abilities. Another recommendation would be to look at ways to fight feelings of IP and determine what coping skills are most effective to combat the effects of IP.

Lessons Learned

I found that the participant pool could be skewed easily. All three of my studies had an adequate number of participants (n = 164); however, the variations between each study group used for comparison were biased. Of the 164 participants, 146 were entry-level instructors and 18 were graduate level instructors, 63 instructors had fewer than 5 years of teaching experience and 101 instructors had 5 years or more of teaching experience, and seven instructors were male compared to 157 female instructors. These inequalities may have led to invalid results. For future studies, I would collect a more varied group of participants from across the United States and would focus on one group of participants individually, such as female instructors, looking at the levels of IP they experience.

I also learned that research findings can be surprising. My expectation was that there would be a statistically significant difference in the level of IP experienced by instructors with fewer than 5 years teaching experience compared to their more experienced colleagues. However, my data did not support that finding, and results differed from other studies involving years of teaching experience.

Conclusion

My study did not provide statistically significant findings that could determine what factors may cause more intense feeling of IP in nursing faculty. My findings did, nevertheless, show a substantial gap in the literature and in research concerning IP among

nursing faculty. Currently, I have found no other research on this subject. Further research on the effects of IP among nursing faculty and ways to decrease or eradicate these feelings should be explored.

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Appendix A: Demographics

1. Gender at birth
   a. Male
   b. Female

2. Do you teach in the classroom setting?
   a. Yes
   b. No

3. How long have you taught in the classroom setting?
   a. Less than 5 years
   b. Five years or more

4. What level do you teach?
   a. Associate degree or entry level Bachelor's degree
   b. RN to BSN
   c. Master's degree
   d. PhD or DNP

5. How long have you taught at your current level?
   a. Less than 5 years
   b. Five years or more

6. How long have you been a nursing instructor?
   a. 0-5 years
   b. 6-10 years
   c. 11-15 years
   d. 16-20 years
   e. more than 20 years

Appendix B: Clance IP Scale

For each question, please circle the number that best indicates how true the statement is of you. It is best to give the first response that enters your mind rather than dwelling on each statement and thinking about it over and over.

1. I have often succeeded on a test or task even though I was afraid that I would not do well before I undertook the task.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

2. I can give the impression that I'm more competent than I really am.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

3. I avoid evaluations if possible and have a dread of others evaluating me.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

4. When people praise me for something I've accomplished, I'm afraid I won't be able to live up to their expectations of me in the future.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

5. I sometimes think I obtained my present position or gained my present success because I happened to be in the right place at the right time or knew the right people.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

6. I'm afraid people important to me may find out that I'm not as capable as they think I am.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

7. I tend to remember the incidents in which I have not done my best more than those times I have done my best.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

8. I rarely do a project or task as well as I'd like to do it.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

9. Sometimes I feel or believe that my success in my life or in my job has been the result of some kind of error.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

10. It's hard for me to accept compliments or praise about my intelligence or accomplishments.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

11. At times, I feel my success has been due to some kind of luck.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

12. I'm disappointed at times in my present accomplishments and think I should have accomplished much more.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

13. Sometimes I'm afraid others will discover how much knowledge or ability I really lack.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

14. I'm often afraid that I may fail at a new assignment or undertaking even though I generally do well at what I attempt.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

15. When I've succeeded at something and received recognition for my accomplishments, I have doubts that I can keep repeating that success.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

16. If I receive a great deal of praise and recognition for something I've accomplished, I tend to discount the importance of what I've done.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

17. I often compare my ability to those around me and think they may be more intelligent than I am.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

18. I often worry about not succeeding with a project or examination, even though others around me have considerable confidence that I will do well.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

19. If I'm going to receive a promotion or gain recognition of some kind, I hesitate to tell others until it is an accomplished fact.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

20. I feel bad and discouraged if I'm not "the best" or at least "very special" in situations that involve achievement.

1	2	3	4	5
(not at all true)	(rarely)	(sometimes)	(often)	(very true)

Scoring the Impostor Test

The Impostor Test was developed to help individuals determine whether or not they have IP characteristics and, if so, to what extent they are suffering.

After taking the Impostor Test, add together the numbers of the responses to each statement. If the total score is 40 or less, the respondent has few Impostor characteristics; if the score is between 41 and 60, the respondent has moderate IP experiences; a score between 61 and 80 means the respondent frequently has Impostor feelings; and a score higher than 80 means the respondent often has intense IP experiences. The higher the score, the more frequently and seriously the Impostor Phenomenon interferes in a person's life.

Appendix C: Permission to use Clance IP scale

Deborah Horvath

Tue 5/26/1 AM

Hello Dr. Clance,

My name is Deborah Horvath and I am currently pursuing my Ph.D. in Nursing Education. My topic for my dissertation is “Effect of Imposter Phenomenon in Nursing Faculty”.

I am sending you this email in hopes of getting permission to use the Clance IP Scale as a measurement tool for my quantitative study. I find the whole IP subject very interesting, and I hope to pursue more research in the future to help nurse educators identify IP and find useful ways to decrease the effects IP has on nursing education.

If you could please contact me at your earliest convenience, granting permission for use of the scale, I would greatly appreciate it. Also, if you have any questions about my plans to use the scale please feel free to contact me.

Sincerely,

Deborah E. Horvath, MSN, RN

Pauline Rose Clance
To: Deborah Horvath

Dear Deborah, I am copying to my associate who answers requests. Should not be a problem Warm regards, Dr c.

andra gailis
To: Deborah Horvath
Cc: Pauline Rose Clance
Mon 6/1/2020 9:43 PM

Dear Deborah,

I work with and am replying to your Impostor Phenomenon (IP) request on behalf of Dr. Clance. You have permission to use and make copies of the scale, *Clance Impostor Phenomenon Scale (CIPS)*, and I have attached it along with the scoring. Given that you are using the CIPS, please use the terminology/title “Impostor Phenomenon” rather than Imposter Syndrome. See explanation below. Thank you.

FYI:

Given the official title of the scale (CIPS: Clance Impostor Phenomenon Scale) includes the words “Impostor Phenomenon,” (IP) Dr. Clance suggests that researchers use that specific terminology (e.g., Impostor Phenomenon) rather than using “Imposter Syndrome,” as that terminology (e.g., syndrome) refers to an official medical diagnosis, of which the IP is not [Kaplan, K. (May 20, 2009). Unmasking the impostor, *Nature, 459*, p. 2].