



DOCTOR OF NURSING PRACTICE (DNP) PROGRAM

A DNP PROJECT

THE PERCEPTION OF IMPOSTORISM

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DATE: 12/4/2018

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Abstract

Graduate Nurse Practitioner (NP) students are expected to leave their current roles as Registered Nurses (RNs) and enter an entirely different scope of practice. In addition to the conflicting research that debates the lack of advantage towards becoming NPs with previous RN experience, there is also a lack of evidence that discusses this specific population relative to the Impostor Theory. This theory discusses the idea that although students have achieved their merits based upon their efforts; they still feel as though they are impostors with their achievements (Sakulku & Alexander, 2011). Students not only require clinical knowledge, but also the emotional preparation to prevent the occurrence of the Impostorism theory which can perpetuate into feelings of limbo, anxiety, stress, and poor assimilation. The purpose of this study was to encourage awareness of Impostorism in Bachelor of Science in Nursing (BSN) students that are evolving into Doctor of Nursing Practice (DNP) NPs. This was achieved by three objectives. First, the relationship of demographics: age, gender, previous RN experience, program specialty, and number of completed clinical semesters were compared with the theory's severity. Secondly, Impostorism and its presence amongst students were measured with the chosen instrument. Lastly, the data was analyzed to be made available for faculty in promoting an active discussion in efforts to counter these feelings. NPs take care of millions of patients each year, yet the focus towards nursing education and ensuring that novice NPs are emotionally well taken care of is lacking. Although the normality of doubt is expected with role transition, this unfamiliar research not only promotes an active discussion within graduate programs, but also acknowledges the feelings of Impostorism amongst these students.

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There are over a quarter of a million nurse practitioners (NPs) with a continuing increase in number of graduates (American Association of Nurse Practitioners [AANP], 2017). Their proven success has been supported by the persistent data that indicates high patient satisfaction and quality of care (Gadbois, Miller, Tyler, & Intrator, 2015). With all the responsibility that NPs carry, existing support should also be present in graduate education. Whether or not NP students feel the pressure of increasing responsibility was measured by the Impostor Phenomenon (IP). Present research was also highlighted to demonstrate the lack of information and need for further study. Thereafter, objectives to obtain this research were collected to underline the importance of acknowledging the psychological effects on NP students and their growth as new providers.

Background and Significance

The IP has evolved throughout history as its umbrella of generalization extends beyond the originally intended doctoral- prepared women (Sakulku & Alexander, 2011). The importance of this study was underlined by the correlation of NP performance and patient care. Simply put, if NP performance was poor, the quality of patient care was also jeopardized (Christensen et al., 2016). Identifying whether there was a parallel relationship with regards to Impostorism has been identified in practicing NPs. In fact, experienced NPs recommended a need for new graduates to have assistance with the transition of roles from a registered nurse (RN) to a NP (Barnes, 2015a; Hart & Bowen, 2016; Jangland, Uhlin, & Arakelian, 2016). The application of the IP particularly with these advanced practice nurse (APN) students could quite possibly encourage a better environment.

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Not all studies applied the same IP conceptual framework but reached the same conclusion. Hutchins (2015) did acknowledge the normality of doubt with regards to advancing careers, but those who fit within the criteria of an Impostor led to increasing negative emotions. Feelings of Impostorism cause stress, anxiety, depression, doubt, and overall pessimistic behavior (Sakulku & Alexander, 2011). Its potential impact leads to poor interdisciplinary relationships, high turnover rates, poor self-development, and limbo in the identity of whether one fit better as an experienced RN or as a novice and inexperienced NP (Barnes, 2015a; Barnes, 2015b; Hart & Bowen, 2016).

The consequences mentioned above illustrated an important fact. The perception of Impostorism quite possibly influences current graduate students' progress and future success as an impending NP. While their education of clinical knowledge had adequately prepared them to manage diseases and disorders; novice NPs indicated the lack of preparation with regards to the office climate and day-to-day procedures, a realm completely different from the bedside (Hart & Bowen, 2016). This was further exacerbated by graduate students who simultaneously attended clinical as a student provider and still maintained a concurrent RN career (Barton, 2011). The acknowledgement of these emotions in student NPs was required to facilitate a better transition into their new role.

Needs Assessment

Each year, the number of NP graduates increase at an alarming rate. Between 2015 and 2016, over 20,000 NPs joined the workforce (AANP, 2017). The impending change in roles must be identified during the student's education while this population continues to grow (Poronsky, 2013). Yet, as demonstrated in the literature, recent studies lack in the identification of students'

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perceptions at the graduate education level, particularly in the nursing realm. Hupcey (1990) concluded that student nurse demographics, prior education, and curriculums did not supportively influence students' expectations as future NPs. Current literature was not present to support these claims and determine whether or not they were applicable to this generation of students. These gaps prompted the need for the conduction of this study.

The scope of practice of RNs and NPs are noticeably different (Clance & Imes, 1976). Program curriculums require attention in determining whether or not they assist in alleviating the possible perceptions of Impostorism. In fact, NP programs should include courses that discuss the socialization of NPs to better prepare students (Faraz, 2016). A lack of focus on current NP students was noted as existing research primarily focused on novice or experienced NPs making recommendations for future NPs without the instigation and action of change (Jangland et al., 2016; Hupcey, 1990). Nursing education must reflect the increasing complexities of healthcare needs. The standards by which nurses have been educated are no longer enough (Institute of Medicine, 2010).

Problem Statement

NP students are expected to be clinically and mentally prepared in becoming NPs as they succeed through their chosen graduate program. At Rutgers University's NP programs, there was no course or faculty lead discussion to address whether students felt this way (Rutgers, the State University of New Jersey, 2018). Candid discussion amongst peers sparked the idea that some students felt ill-prepared with the impending transition. Complaints of stress, anxiety, and doubt on completing the program were discussed. Further elaboration on whether all students have these emotions elicited an idea that required addressing. While NPs continue to provide patient

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care, there was an obvious lack of data to emotionally support these same students (Gadbois et al., 2015). Therefore, this study aimed to address this problem. Do RNs in a current graduate program, who are becoming APNs, experience Impostorism?

Aims and Objectives

Regardless of whether students adequately prepared for their roles, feelings of Impostorism could remain (Aubeeluck, Stacey, & Stupple, 2016; Clance & Imes, 1976). The overarching aim of this study was to encourage the awareness of Impostorism's existence in graduate students. The problem was measured and analyzed through several objectives. Varying studies described the lack of support involved with previous RN experience and the foundations of building NP education (Poronsky, 2013; Barnes, 2015a). To substantiate this claim, the first objective was to recognize the correlation between each of the following demographics such as: age, gender, years of RN experience, and completed clinical hours with the severity of Impostorism. The second objective measured the severity of Impostorism amongst students. Permission of use by Dr. Pauline Rose Clance, the creator of the IP and the Clance Impostor Phenomenon Scale (CIPS) was obtained. The CIPS described students' attitudes and perceptions in relation to the chosen conceptual framework. The goal for this project was to complete data collection by Fall 2018. Once data collection was completed, data interpretations of CIPS scores were statistically calculated to reflect the chosen variables relative to Impostorism: depression, self-esteem, self-monitoring, and social anxiety (Chrisman, Pieper, Clance, Holland, & Glickhauf-Hughes, 1995). Thereafter, the last objective was to provide data for the Rutgers faculty and encourage an active discussion in facilitating healthier methods of assimilation.

Literature Review

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The review of literature identified the available research regarding Impostorism and its relative variables. A graduate NP student encounter issues entirely different from their previous roles as RNs. Changes in scopes of practice and positions in healthcare are a few of the impending responsibilities that arise with becoming a provider (Hamric & Hanson, 2003). The evidence to support this project was collected with the goals of finding recent literature (i.e. within the last five years) that discussed Impostorism with the specific population of graduate NP students. There was difficulty in locating research with those variables in mind. Therefore, the search was widened to include experienced NPs, evidence relative to the emotions associated the transitions in scope of practice, and a wider timeframe. The research below draws attention to several overarching themes such as experience, perception, doubt, anxiety, and stress regarding the impending reality of new NPs. Gaps in the current literature underlined the necessary focus in better understanding the perception of Impostorism. Thereafter, efforts to ease this perception are discussed to bridge these gaps for future graduate students.

Although experience is necessary in any role to facilitate better preparedness, this assumption was not reflective of RNs seeking to become NPs. Barnes (2015) countered this statement that graduate NP students, previously RNs, did in fact have an advantage to becoming NPs with their backgrounds in healthcare. The author's results determined that clinical experience as RNs did not hinder nor facilitate positive assimilation as NPs. These implications should encourage graduate schools to prepare students for this shift (Barnes, 2015). This data was further strengthened by Hart and Bowen's (2016) research that also reached a similar conclusion. Nearly 700 NPs were surveyed and almost half of the participants expressed the need for new graduate NPs to have mentorship or assistance with transition. Increasing age or years of previous RN experience did not facilitate a better readiness. In addition, 50% of those responders

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also felt as they were incompetent in their new role (Hart & Bowen, 2016). This thought of incompetence leads into the framework that guided this study- the IP.

In conjunction with the idea of incompetence, the idea of Impostorism or role ambiguity was also seen with NPs. Faraz (2016) supported this belief in the notion that new NPs felt as though they were in limbo while they were no longer RNs and nor physicians. These novice providers were hindered by feelings of doubt, apprehension, uncertainty, and lack of awareness outside of their prepared clinical skills (Faraz, 2016). Brown and Olshansky (1997) reached the equivalent conclusion with newly graduated NPs. These new providers who certainly earned the title still felt as though they were torn between the role they used to have and the role they desired (Brown & Olshansky, 1997). Jangland, Uhlin, and Arakelian (2016) discussed a similar outcome in regards to the emotional impact new NPs had in identifying with a new role. Feelings of loneliness, stress, and poor self-esteem were emotions exhibited by their sample population. The research clearly illustrated the difficulty in assimilating into a new role regardless of preceding experience (Jangland et al., 2016).

With attention to graduate education, Hamric and Hanson (2003) discussed the lack of instruction relative to the NP role itself. Aubeeluck, Stacey, and Stupple (2016) performed a small study with 27 nursing students. Nearly 70% felt as though they were “impostors” with their imminent responsibility (Aubeeluck et al., 2016). Outside the realm of nursing, the idea of the IP was also tested with undergraduate students. Kumar and Jagacinski (2005) determined that the IP correlated with anxiety and confidence in intelligence. There were evident gender differences. Females were more affected by Impostorism and had more anxiety and lower confidence (Kumar & Jagacinski, 2005). The possibility that genders influenced how one copes

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can be applicable to this female dominated profession (i.e. NPs). A lack in literature relative to graduate students was noted.

Evidence in literature attempted to address these perceptions from a professional standpoint. Fitzpatrick and Gripshover (2016) discussed the acclimation of novice NPs and Physician's Assistants (PAs). In efforts to smooth the "transition shock" after graduation, a support group was introduced to encourage discussion and debate regarding the issues that new providers encountered (Fitzpatrick & Gripshover, 2016, p. e419). The researchers also had difficulty in finding programs that discussed employees' emotions and well-being. Therefore, topics discussed included the necessity of encouraging leadership with interdisciplinary support and the promotion of overall job satisfaction. Although the idea was hopeful, poor response proved the intervention to be unsuccessful. Consequences associated with poor assimilation included high turnover rates, increasing stress, and career dissatisfaction (Fitzpatrick & Gripshover, 2016).

Graduate NP students are expected to treat, diagnose, and care for patients from an entirely new perspective. The curriculum ensured that these graduates were prepared with the necessary clinical knowledge by promoting evidence-based practice and knowledge; yet whether or not the need to introduce courses surrounding the shift between professions must first be measured. A lack of courses regarding the discussion of the NP role itself was noted. Current trends and the specific expectations of APNs along with the legalities surrounding this new role was a vital discussion to be had (Hamric & Hanson, 2003). The available research focused primarily on novice NPs and their recommendations for future graduates (Hart & Bowen, 2016; Faraz, 2016; Brown & Olshansky, 1997; Jangland et al., 2016; Fitzpatrick & Gripshover, 2016). The culmination of research continued to identify areas that required further study. The lack of

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data regarding relevant research of Impostorism and its applicability to graduate nursing students was noted. Rather than addressing the consequences of Impostorism in hindsight, a proper research study must measure these perceptions early on to provide a positive influence for future NPs and their successes. This project sought to measure perceptions in order to better prepare these graduates for a better development into their new roles.

Conceptual Framework

The IP guided the study's direction. Please note the spelling of this term. Rather than "imposter," the word: "impostor" had been specifically created for this theory. This framework was constructed by Dr. Pauline Clance in 1985 to primarily describe highly educated women (as cited in Sakulku & Alexander, 2011). As of October 2017, almost 90% of NPs in the United States (US) were females (Kaiser Family Foundation [KFF], 2018). Therefore, Clance's IP certainly related to current APN students. This was not to negate the also several thousand male NPs currently in practice. In fact, Sakulku and Alexander (2011) extended the theory's generalizability across genders and professions.

The IP was defined by the belief that although there was proven success by the grades attained, this same success was not internally recognized. These individuals believed that they have deceived their professors into thinking that they are intelligent, reached their successes by luck, and ultimately fooled others who may believe that they are worthy of their degrees. Herein lays, the term "impostor" (Clance & Imes, 1978, p. 1). The internal battle that coexists with the external success presented a cycle that contributed to anxiety, doubt, and stress (Langford & Clance, 1993). This chosen framework guided the direction of this study as the emotions associated with the IP intertwined with the chosen population of APN students. Whether or not

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students felt like impostors provided a deeper understanding of themselves as well as how they may react to their new role.

Methodology

This Doctor of Nursing Practice (DNP) project applied a quantitative method to determine whether or not graduate APN students perceive themselves as impostors. This research design was chosen with reflection of the project's goal. Demographics such as age, specialty program, previous RN experience in years, and completed clinical hours was compared with varying levels of Impostorism. These numerical analyses were applied to the data attained from a larger sample size and encourage objectivity by the researcher. Another advantage to this quantitative method was its reliability and credibility to encouraging change amongst involved stakeholders (Center for Innovation in Research and Teaching [CIRT], 2018). Thereafter, the research question was interpreted into a simplified and numerical conclusion.

Setting

This study took place at the Rutgers University (RU), Newark campus. This particular location was the main campus for all eleven Bachelor of Science in Nursing (BSN) to DNP specialty programs. Although other nursing programs were also offered here, a particular focus was on post-baccalaureate to DNP programs (Rutgers School of Nursing [RUSON], 2018). This academic facility not only offered the sample population, but was also the location where the results were first disseminated. The United States (U.S.) News and World Report boasted RU's DNP programs to be within the top twenty in the entire country (2018). Therefore, this setting presented a physical area of needed investigation in whether the IP occurred within these programs.

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Study Population

Within RU, the study population was BSN to DNP graduate students. Inclusion criteria included: those within Adult-Gerontology Acute Care, Adult-Gerontology Primary Care, Family Nurse Practitioner (FNP) - Primary Care, FNP in Emergency Care, Psychiatric/Mental Health Nurse Practitioner, and Women's Health Nurse Practitioner; more specifically, students who will graduate in spring 2019 and 2020. Within the population that met the inclusion criteria, demographics were further studied. Exclusion criteria included students in Post Master's DNP, Leadership-Management, Nurse Anesthesia, Nurse Midwifery, and Pediatric Nurse Practitioner programs (RUSON, 2018). Thereafter, a convenience sampling was conducted within those of the inclusion criteria. About 93 students graduated in May 2018. With a projected 20% increase per year to take into consideration for graduating students, 112 students were estimated to graduate in May 2019 and 135 students in May 2020. The total of both graduating classes estimated to 247 students. This population included all 11 DNP programs (S. Glogocheski, personal communication, May 10, 2018). While the inclusion criteria included six of the total programs, about 50% of this student population was taken into consideration. Therefore, an estimated 120 BSN to DNP students (within the inclusion criteria) are set to graduate in spring 2019 and 2020. The sample size of 92 with a confidence interval (CI) of 95% was estimated to ensure credibility of the study's results (Qualtrics, 2010). Attrition was not a concern as data collection occurred once without a post-test.

Other essential stakeholders should also be mentioned to encourage transparency. The chairperson and team member, both faculty members at RU, assisted in the facilitation of this project. A statistician was not hired to for data analysis. Lastly, the project's conclusion involved RU's graduate nursing faculty and administration.

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Study Intervention

The CIPs survey was provided for the subjects to complete (Clance, 1985, p. 20-22). Please note Appendix F for a copy of this scale. The CIPS scale was administered one time to each participant. Once the data was collected and analyzed, a presentation to the Rutgers faculty and administration was conducted to explain the results.

Outcome Measures/ Study Intervention

The CIPs survey was the main study instrument for this project. This scale was used to determine whether or not the chosen sample group exhibited these perceptions. Although there were several tools available to measure the same outcome; the Perceived Fraudulence Scale (PFS) and the Harvey Imposter Phenomenon Scale (HIPS). This CIPS measurement was specifically chosen due to its easier usability, shorter length, and Cronbach's alpha ranging from 0.84 – 0.96. This twenty question Likert scale identified those who felt as though they are imposters versus those who do not have these characteristics (Crisman, Pieper, Clance, Holland, & Glickauf-Hughes, 1995, p. 457-459).

This scale was developed by Dr. Pauline Rose Clance to determine how much the subjects felt like impostors. Permission for use was obtained via email on March 10, 2018. Directions for the survey encouraged participants to answer each statement without overthinking the context of the sentence. Ranging from numbers 1-5, each number referenced a severity. One was "not at all true," two was "rarely," three was "sometimes," four was "often," and five was "very true" (Clance, 1985, p. 20-22). This survey was distributed in person to ensure that the subjects completed this survey correctly and in its entirety. Any questions concerning the survey were directed to the DNP candidate. Anonymity was obtained with the use of randomized letters and numbers for each surveyed.

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Benefits/Risks

The proposed benefits related to the dissemination of information upon project completion. The data collected allowed for RU faculty and administration to better understand the emotional aspect of the IP's relevance to students' progression throughout their DNP programs. Risks such as lack of anonymity was protected with the use of codes, age ranges (rather than specific ages), and groupings. Another risk was the potential emotional component that may have arose with the completion of this study instrument. A referral to Student Services and its contact information was offered for all students on the Waiver of Documentation of Consent (Appendix G). This risk was also mitigated by the strong emphasis that the completion of this scale was voluntary. Both benefits and risks were disclosed.

Subject Recruitment

Recruitment strategies included finding available students within the nursing building, identifying where these students had classes throughout the semester, and fliers around campus with permission by the International Review Board (IRB). Please note Appendix H for a sample of a flier that assisted with sample recruitment. To ensure minimal vulnerability, ensuring student confidentiality and anonymity was heavily stressed. Subjects were encouraged to keep the Principal Investigator (PI)'s email address as listed on the consent form to assess the data's results upon completion if interested. Recruitment for data collection was completed once a collection based upon the 95% CI of a supportive sample size was met, which was an estimated 92 students.

Consent Procedures

Upon the subject's interest in the study and confirmation that the potential participant was a candidate, the PI thereafter offered the consent document. As specified in the consent, the

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subject's voluntary participation was confirmed once the subject completed the study. No subject signature was required as a Waiver of Documentation of Consent was selected for the consent form. The survey was offered immediately after the subject read the consent. The document included the researcher's email address. A brief introduction and the study's purpose were stated with an estimated time of completion. Proposed benefits such as research dissemination were included. Risks, although minimal, was also mentioned (Roush, 2015). Please note Appendix G for a consent sample.

Subject Costs and Compensation

The subjects did not incur monetary costs. Small thank-you gifts (i.e. pen, notepad, candies) were offered to the subjects for their time. Partaking students were also encouraged to let their peers know about the project's existence (i.e. snowballing) (Roush, 2015).

Project Timeline

Please note Appendix D for the timeline of the project. Date estimations were initially made to compensate for the potential obstacles or time extensions that could have been encountered. Although the dates were extended until the end of the spring 2019 semester, the attempt to finish the project ahead of time was strongly encouraged and successfully completed earlier than planned. Frequent meetings with the chair person and team member were conducted to ensure the project's right direction.

Resources Needed/Economic Considerations

The budget for this DNP project was initially estimated. There was no numerical cost to RU aside from the use of its facilities (i.e. conference rooms, classrooms, and computer labs) within the Stanley Bergen Building (SSB), Biomedical and Health Sciences at Newark.

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The DNP candidate did not receive monetary compensation for implementation. Small gifts were provided to all voluntary subjects for their time. As mentioned earlier, there were an estimated 120 students within the inclusion criteria. Therefore, at most \$200.00 was allocated for subject participation. An exact \$95.00 was spent on gifts for subject participation. Miscellaneous costs such as supplies (i.e. posters, papers, and pens) did not amount to over \$200.00.

Evaluation Plan

Data Maintenance/Security

Maintaining subject and data confidentiality must be discussed. The CIPS and demographic data were kept in a locked cabinet in the Chair's office in the SSB- Room 1138. The chair and team member were only privy to the data once they were de-identified. Specific ages were grouped by ranges. Each survey had random codes assigned to maintain anonymity. The Statistical Package for Social Sciences (SPSS) program was used on the DNP candidate's password protected personal computer. As per RU policy, the hard copies of the CIPs are to be maintained at RU for at least 6 years after the study's completion.

Data Analysis

Data analysis clarified the interpretation of data via several perspectives. Descriptive statistics were simplified into three levels of measurement. Sample gender and expected graduation date (i.e. May 2019 or May 2020) were classified as categorical levels of measurement. Whereas, age, years of RN experience, number of completed clinical semesters as of September 2018, and cumulative survey scores were identified as continuous variables. There was debate as to whether to classify the survey score as an ordinal categorical level of measurement versus a continuous ratio variable. At the advisement of Dr. Ann Bagchi, Assistant

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Professor at the RU School of Nursing, the survey score was ultimately categorized as a continuous variable because although each question on the survey score was in a Likert format question, the cumulative score was applied for the purpose of this study (A. Bagchi, personal communication, October 9, 2018). This data was described by mean, median, and mode (Greasley, 2008). Thereafter, the above-mentioned variables were individually compared and correlated with overall CIPs scores.

The summation of scores from CIP's twenty sentences was categorized into four areas. The subject had few Impostor attributes with a score of 40 or less, moderate impostor scenarios with a score from 41-60, frequent IP emotions with scores 61-80, and often and intense experiences with scores above 80 (Clance, 1985, p. 20-22). Thereafter, SPSS was used to find whether relationships existed. The Spearman's Rank Correlation Coefficient, Mann Whitney U test, and Kruskal-Wallis H test were chosen for data analysis (Greasley, 2008; A. Lund & M. Lund, 2018; IBM, 2017).). Each characteristic was compared with the attained CIPs score to determine whether certain relationships held more substantiality than others to the score. Subsequently, conclusions were made to increase the awareness of the IP.

Findings

Although the initial goal was to collect the needed surveys by December 2018, the end of the fall semester, this goal was achieved by October 5, 2018. A total of 92 applicable surveys were collected to reach the confidence interval of 95%. Descriptive statistics in Appendix I further elaborated further details on the variables of each sample participant.

The mean age for all 92 participants was 32.47 years. The median age was 31.00 years with a minimum of 25.00 years and a maximum of 60.00 years. The average age of completed years of RN experience was 7.45 years. The median was 6.00 years. The minimum number of 1

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year completed while the maximum was 35 years of completed nursing experience. The number of clinical semesters completed ranged from 0-8 semesters, while the mean was 1.75, mean 2.00. Of the 92 participants, 6 were male and 86 were female. Those graduating in May 2019 were 50 of the 92 participants, while there were 42 students graduating in May 2020. Fifty-three students were from the FNP- Primary Care program. Seven were from FNP- Emergency Care. Twenty were Adult-Gerontology Primary Care. Seven were from Adult-Gerontology Acute Care. Four students were from the Psychiatric/Mental Health program. Lastly, 1 student was obtained from the Women's Health program. As for the cumulative survey score, the average was 59.88 with a median number of 58.00. A minimum score of 30 and a maximum score of 92 were calculated. Therefore, the average score for all 92 students indicated a Moderate amount of impostor attributes. Please note Appendix I for further details and a graphic representation of the data discussed above. Relationships and correlations between the demographic variables and the cumulative IP score are discussed below.

A Spearman's Rank order correlation was chosen to assess the relationship between age and survey score with the 92 participants. There was no statistically significant correlation between age and the overall survey score $r(98) = 0.050$, $p = 0.636$ ($p > 0.05$). Therefore, age did not influence the overall survey score. For example, increasing or decreasing age did not provide less or more feelings of Impostorism (A. Lund & M. Lund, 2018; IBM, 2017). Please note Table J1 for visual representation of this calculation.

A Spearman's Rank order correlation was again used to assess the relationship between years of completed RN experience with the cumulative survey score. There was no statistically significant correlation as $r(98) = 0.018$, $p = 0.863$ ($p > 0.05$). Students' prior experience as an RN did not lessen or increase the severity of Impostorism (A. Lund & M. Lund, 2018; IBM, 2017).

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This idea reached the similar conclusion with Barnes (2015). One may assume that previous experience as a nurse can be beneficial with regards to assimilating into an NP, this hypothesis was refuted in this study. Please note Table J2 for visual representation of this calculation.

A Spearman's Rank order correlation was also applied to determine whether a relationship existed between number of clinical semesters completed as of September 2018 and the cumulative survey score. There was a statistically significant correlation as $r(98) = -0.437$, $p = 0.000$ ($p < 0.05$). The null hypothesis was rejected, and the alternative hypothesis was accepted. There was an inverse relationship between the two variables. For example, as the number of clinical semesters increased, the amount of Impostorism decreased (A. Lund & M. Lund, 2018; IBM, 2017). Please note Table J3 for visual representation of this calculation.

A Mann Whitney U test was run to determine differences in survey scores between males and females. Distribution of survey scores for males and females were not similar, as assessed by visual inspection of the graph noted in Table J4 There was no statistical significance $U = 311.00$, $z = 0.839$, $p = 0.142$ ($p > 0.05$). As a result of the lack of significance, the null hypothesis is retained. The cumulative survey score is the same across gender. In fact, males had a cumulative survey score of 57.50 and females with 58.00, both qualified as having moderate Impostor attributes (A. Lund & M. Lund, 2018; IBM, 2017; Clance, 1985). Although the IP theory had originally been intended for highly educated doctoral women, this framework has extended its range of relevance across genders and was made evident in this study (Sakulku & Alexander, 2011).

A Kruskal-Wallis test was applied to determine if there were differences in survey score between the six different program specialties. Distribution of survey scores was similar for all specialties (median 58.00- moderate Impostor attributes), (as assessed by visual inspection of the

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box plot in Figure 2, Appendix J) apart from the Women's Health NP student (IBM, 2017; Clance, 1985). This exception is discussed in the limitations portion of this project. Overall, median survey scores were not statistically significant between specialties. The null hypothesis was retained as $X^2 = 5.438$, $p = 0.365$ ($p > 0.05$) (IBM, 2017). Therefore, students had the same Impostor attributes regardless of their program specialties.

A Mann Whitney U test was run to determine differences in survey scores with those graduating in May 2019 versus May 2020. Distribution of survey scores for the two groups were similar, as assessed by visual inspection of the graph noted in Figure 3 in Appendix J. Also, those graduating in May 2019 had a cumulative survey score of 55.00 (moderate Impostor attributes) versus those graduating in May 2020 had a cumulative survey score of 65.60 (frequent IP emotions). There was statistical significance as $U = 1,362.50$, $z = 2.45$, $p = 0.04$ ($p < 0.05$). Therefore, the null hypothesis was rejected, and the alternative hypothesis was accepted. There was a notable difference in scores reflective of when students graduated. Students who are further into their DNP programs have less feelings of Impostorism versus those who were not as advanced into their academic career (A. Lund & M. Lund, 2018; IBM, 2017; Clance, 1985).

Recommendations

Economic Implications

The economic implications associated with the severity of Impostorism in the sample population can financially burden the healthcare system. As Impostorism moderately exists in these students, these feelings can perpetuate into high turnover rates and poor job assimilation (Barnes, 2015a; Barnes, 2015b; Hart & Bowen, 2016). Future employers have the expectation to invest in hiring employees and providers that will in turn financially benefit the overall organization. If these same NPs are leaving their positions as a result of the lack of emotional

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preparation and stress, the lack of financial return negatively impacts the time and costs spent on hiring employees. Furthermore, poor job assimilation impacts NP performance. If NPs are dissatisfied and overwhelmed in their current position, patient care can also be jeopardized which can potentially create an unhealthy cycle of lack of quality patient care and poor patient outcomes (Christensen et al., 2016). Therefore, the idea to increase the awareness of Impostorism cannot only provide for a better perspective on NPs entering profession, but also financially benefit a variety of stakeholders.

Impact on Healthcare Policy and Patient Safety

The implications relative to healthcare were indirect. This DNP project sought to gain perspective at the academic level to promote change prior to entering the workforce. Although the results did not actively encourage change within the healthcare system, its potential impact could still cascade into patient care. Impending NP students could potentiate their feelings of Impostorism into their careers; this complication may create career dissatisfaction and increasing amounts of stress in combination with present responsibility as a provider (Fitzpatrick & Gripshover, 2016). Therefore, although healthcare quality was not studied with the correlation of Impostorism, this DNP project offered an alternative insight with its relationship with current graduate NP students.

Implications for Education

The overarching aim to encourage awareness of Impostorism's severity amongst graduate students was made evident with the application of the Clance Impostor Phenomenon Scale survey. As discussed in the study's results, students had moderate feelings of Impostorism. Horner (2017) successfully identifies the positive relationship between mentorship and NP satisfaction. In fact, mentorship could create an environment that has been recognized to not only

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improve job satisfaction, but also decrease turnover rates and thereby increase patient care and outcomes (Horner, 2017). Rutgers University's BSN to DNP program does not have a class or a mentorship program that discusses role transition and the emotional obligations with entering a new role (RUSON, 2018). In efforts to create an environment where students can have an open discussion about their feelings of Impostorism, a small pilot study could be introduced to determine its success reflective of Horner (2017)'s intervention of mentorship.

In efforts to apply this new-found data into tangible recommendations, discussion regarding the feasibility in the creation of a mentorship program or partnership is introduced. Impostorism is moderately noted in the sample group and due to its generalizability with a CI of 95%, it is reflective of Rutgers University's BSN to DNP student population. In addition to the necessary clinical practicum courses of shadowing a variety of providers (i.e. physicians, NPs, Physician Assistants (PAs)), the need to enhance this preceptorship is a vital requirement in NP education (Roberts, Wheeler, Tyler, & Padden, 2017).

Mentorship is defined as a method to close the chasm between reality and academia. Relative to graduate nursing education, Barker (2006) emphasizes this idea of mentorship as promoting growth, self-development, and a method to becoming a successful NP. Unfortunately, research continues to be lacking with regards to evidence based literature that promotes a specific intervention that has been effectively applied in nursing education, specifically at the graduate level (Barker, 2006; Brown & Olshansky, 1997). Yet, these same researchers have highlighted the impact of having a support system (i.e. mentorship between an experienced and novice provider) to benefit the demands of healthcare and the patients within it (Barker, 2006). Therefore, the introduction of a program that could be made available to link students with

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experienced NPs during their academic career to bridge the gap between feeling like an Impostor and gaining insight and perspective through experienced APNs.

The encouragement of joining professional organizations such as the American Association of Nurse Practitioners (AANP) is lacking in the graduate program (2018). AANP offers an opportunity to find preceptors and mentors within its forum (AANP, 2018). Rather than creating a heavier workload for faculty to provide additional support systems, experienced providers must be willing and volunteer for this influential role (Roberts et al., 2017). Requiring students to become members of a professional organization relative to their NP career and link with those experienced providers offers a method to address Impostorism. Organizations such as American Academy of Nurse Practitioners Certification Board (AANPCB) and AANP allow mentorship as a method towards certification renewal for NPs. Other groups entice NPs to mentor with continuing education credit. These same professional bodies recognize the need of preceptorship in the realm of academia (AANP, 2018; Roberts et al., 2017). Roberts et al. (2017) conducted a study to determine whether NPs would be interested in the participation of a national archive of preceptors. More so than not, most respondents indicated that they would be open to this collection (Roberts et al., (2017).

Academic institutions should require students at the beginning of their educational career to enter a professional organization and build relationships amongst experienced NPs. To determine the efficacy of whether mentorship has decreased the severity of Impostorism, a pilot study to determine whether mentorship has positively influenced Impostorism via the CIPs survey can be measured as a pre-test/post-test to measure whether Impostorism has decreased within the program.

Translation

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The feasibility in the application of this study is certainly possible. A moderate amount of Impostorism has been established. Although intervention suggestions may not necessarily be applied with those graduating in May 2019, future students can certainly benefit from the pilot study above. The study had great reception with the production of this project. Students were not only curious of their own scores, but also how their peers scored. Many students discussed how they wished they had someone who had gone through the program to guide them in the right direction. Although the score does not reflect academic performance, it provided a better insight for educational institutions at large in understanding their graduate students on an emotional level. Therefore, this project provides a beneficial leeway into leading an active discussion about the perceptions of Impostorism.

Dissemination

With regards to data dissemination, students were encouraged to attend the DNP poster presentations. Students could individually score their own surveys at the time of data collection. Again, most students were more curious on how their peers felt to determine whether their personal feelings matched others'. Even undergraduate students who may have overheard the PI in discussion of the project shared interest. In efforts to maximize anonymity, students were encouraged to attend the poster presentation once data was fully de-identified and analysis in determining whether relationships in the studied variables had statistical significance. In addition, future presentations to faculty and administration will also be another method to disseminate the data collected in this study.

Professional Reporting

Professional reporting requires various levels of dissemination. At a local and state level, the project will be presented in the spring in April 2019 at the Rutgers University's Poster Day

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Presentation to share aggregate data with the subject population. As a result of the great reception received during the data collection phase and the many impromptu discussions held amongst students, the poster presentation offers a setting where the PI can share the objective data in its entirety. Furthermore, this project tentatively plans to be submitted to the *Journal of Nursing Education* (JNE). This journal is chosen as its mission reflects the overarching aim of this study- to increase awareness in the realm of academia. JNE encourages the evolution of nursing with the active application of examining areas like graduate education, mentorship programs, and educational innovations to not only improve the standards of practice for NPs, but also the quality of patient care (JNE, 2018). This professional reporting allows for the research to be shared at a national level. Therefore, future and current students, educators, and NPs can encourage change and assistance in efforts to combat this idea of Impostorism.

Discussion

The expectation of feeling uncertain of oneself has already been established when entering a new profession (Hutchins, 2015). The results indicated that students do in fact feel as though they are impostors with a moderate number of attributes relative to Impostorism. Although Dr. Clance (1985) indicated that many prosperous people do exhibit these comparable scores, this was not to negate those accompanying feelings of uncertainty and apprehension which can perpetuate into tangible consequences such as job turnover and poor interdisciplinary relationships (Barnes, 2015a; Barnes, 2015b; Hart & Bowen, 2016).

The existence of Impostorism was evident. The aim to encourage Impostorism's presence in the chosen population was highlighted not only by the survey scores, but also by the spur-of-the-moment discussions stimulated by the conduction of this project. The first objective in determining if relationships or correlations between the demographics and severity of

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Impostorism has been recognized. The second objective as to whether Impostorism existed in the chosen population has not only been identified, but also measured. The last objective in providing having the data available for Rutgers' faculty has been completed with the conclusion of this project.

In conjunction with the quantitative data collected, informal and impromptu discussions were held. Although developing qualitative data was not the intention of this project, its finding should still be mentioned. Students were more interested in how their peers felt throughout the program. Rutgers University's BSN to DNP graduate programs are a hybrid of in-class and online classes (RUSON, 2018). In addition, many hours are spent independently with research and clinical practicum. Therefore, many students were not sure if their own perceived anxiety and stress within the program was considered the norm amongst their peers. These same students wanted to make sure that they were not the only students who felt overwhelmed, lost, confused, and concerned about finishing their programs. To reiterate, the survey, CIPS, solely measures Impostorism and does not reflect academic performance, but these same perceptions can emotionally impact these future providers and thereby hinder their successes.

Limitations

There were several limitations to this study that require discussion. Due to the convenience sampling, it was difficult to obtain an even number of both genders for the study as there were a significant number of more females than male students within the population. Yet it is important to note that females are more prevalent than males in practice (KFF, 2018). It was also difficult to ascertain specific numbers of students in each specialty program and when they planned on graduating as students may change their major, postpone their graduation dates, or may have been required to retake certain classes. Therefore, estimations were made based upon

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the increasing number of students entering the program (S. Glogocheski, personal communication, May 10, 2018). It is also important to note that only one Women's Health NP student participated in the study. As of November 2018, there was only one Women's Health student graduating in the following month from the entire program. Although one student's survey score cannot generalize how all Women's Health graduate students may feel, a small population inhibits a strong sample size and generalizability.

Conclusion

During the project's synthesis, it was determined that prior to the establishment of the BSN to DNP graduate programs; previous courses discussing role transition were present. These classes have been removed from the curriculum (P. Hindin, personal communication, May 7, 2018). Although it is difficult to ascertain whether the course benefitted students was with regards to the impending new role, there has not been a course, discussion, seminar, or meeting that discusses the idea of role change and lack of readiness.

Hopefully this project has not only enlightened students, but also current and future educators to consider introducing interventions such as mentorships for current students. While Hart and Bowen (2016) discussed how experienced providers recommended the need for transition assistance and mentorship for novice NPs, Horner (2017) indicated positive results in job satisfaction for both the new NPs and the experienced NPs that participated in the introduced mentorship program. Dr. Clance (1985) also discussed the need in seeking a mentor as a therapeutic intervention to combating Impostorism. Therefore, feelings of depression, self-esteem, self-monitoring, and social anxiety could be recognized early with interventions (Chrisman, Pieper, Clance, Holland, & Glickhauf-Hughes, 1995). Education institutions could

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view this intervention as a method to not only improve assimilation for graduate NP students, but also indirectly benefit patient care (Horner, 2017).

This DNP project contributes an alternative perspective of current graduate students, particularly in the chosen BSN to DNP program. As the number of graduating NP students continue to grow, more attention must be paid to this population (AANP, 2017). Interventions to discuss these unfamiliar feelings must not only be mentioned, but also be addressed with concrete evidence. As evidenced by the data, students do feel like impostors and moderately so. Although the increasing severity of Impostorism may not equate to a poor academic performance, impostors could be hindered from advancing their careers due to the overwhelming self-doubt (Clance, 1985). To counter this self-doubt, the establishing a mentorship program is necessary in promoting a healthy transition.

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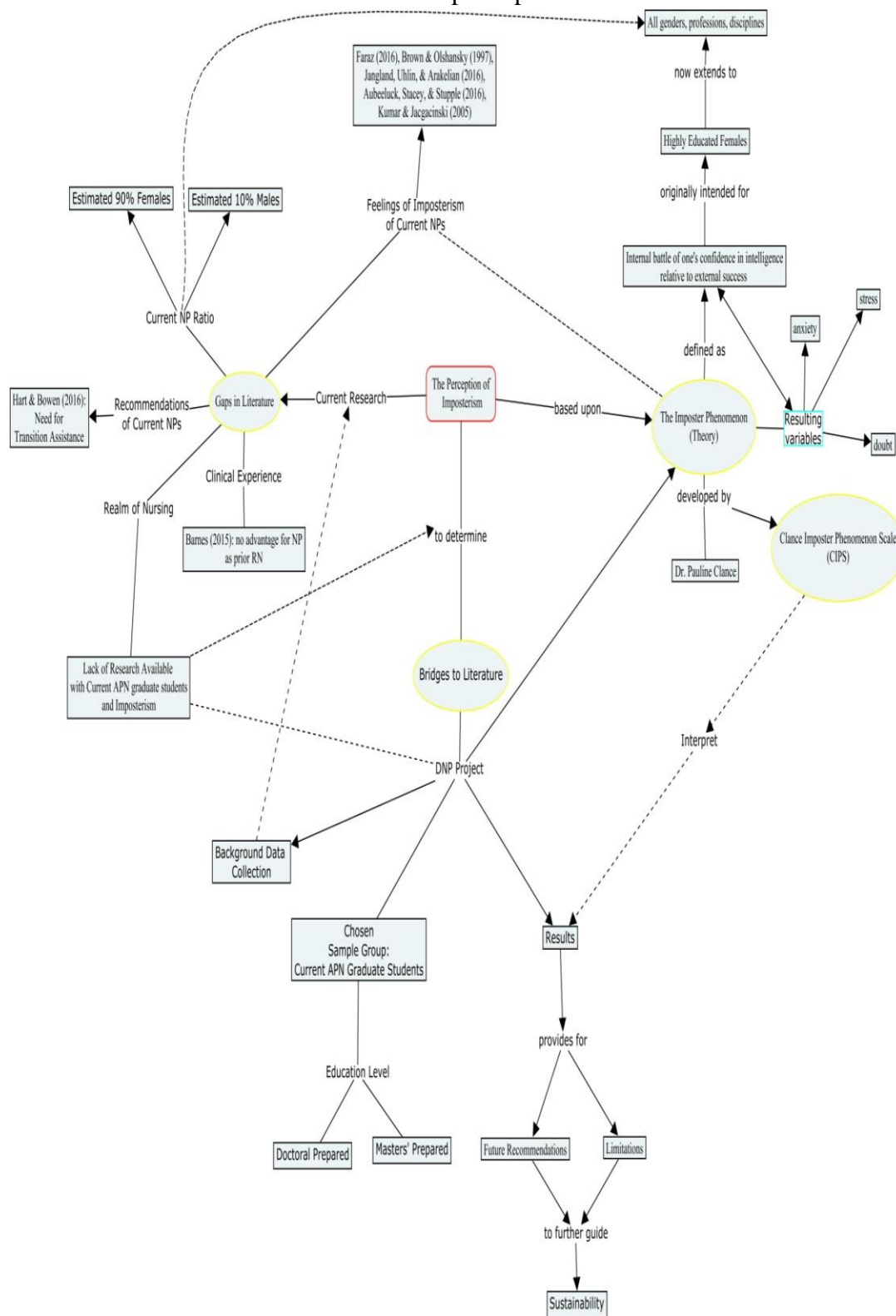
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Appendix A

Concept Map



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Appendix C

Table of Evidence

Johns Hopkins Nursing Evidence-Based Practice Appendix G: Individual Evidence Summary Tool

Date: 2/2/2018

Article Number	Author & Date	Evidence Type	Sample, Sample Size, Setting	Study Findings that help answer the PICO question	Limitations	Evidence Level & Quality
1.	Aubeeluck, A., Stacey, G., & Stupple E.J.N. (2016).	Cohort Study (Research)	Sample: graduate entry nursing (GEN) students Sample Size: 27 Setting: United Kingdom (U.K.) - University	Almost 70% of the GEN students studied had feelings of self- doubt with the impending role transition. This self- doubt is defined as the Imposter Phenomenon (IP). IP discusses the idea of feeling internally incompetent although externally successful. Although a certain amount of doubt is expected with transition, feelings of self-doubt can exacerbate into symptoms such as: sadness, dissatisfaction, and anxiousness. The study emphasizes that an active discussion is necessary in acknowledging these feelings and thereby identifying	The sample size is small with 27 students. The program did not specify the students' graduate degree. The study was conducted in the U.K. and may not reflect the U.S.'s qualifications for nurse practitioners.	Level III, C (low quality)

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				positive measures to neutralize the Imposterism.		
2.	Barnes, H. (2015a)	Descriptive Cross-Sectional Study (Research)	Sample: Graduate prepared NPs currently practicing Sample Size: 352 Setting: US	A Likert Scale was used to determine the sample's experience. A higher score reflected a more positive transition. The spectrums of competence, role comprehension by others, and educational support swayed transition. Although, not outright stated with regards to the IP, the data collected regarding these variables will assist in the background of the study. The researchers also indicate that previous RN experience does not create a smoother transition to an NP. Experienced NPs have higher satisfaction with their role after mentorship.	Almost ninety percent of the sample size was masters prepared NP students. A convenience sample was gathered from a national NP conference. The average amount of experience as an NP for the sample size was nearly 8 years. Therefore, the possibility of incorrect memory recall can limit the study's validity. This particular study does not center its framework on IP, but does discuss the need for transition assistance and presents background information for the study.	Level III, B (good quality)
			Sample: Masters	The majority of the samples were females and Caucasians.	There is a noted lack of ethnic diversity in	

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3.	Brown, M. & Olshansky E.F. (1997).	Qualitative Longitudinal Study (Research)	prepared NPs Sample Size: 35 Setting: Primary Care Specialties	The recent graduates were RNs for at least 10 years before this role transition. Participants were interviewed three times after the first year after graduation. New NPs are susceptible to self-doubt in their new role. The IP is also discussed here as NPs had feelings of illegitimacy and apprehension. There was an evident transition within these participants as the progression of interviews from the first month to the twelfth month differed as increases in competence and confidence were identified.	the sample size. This can influence data regarding cultural differences and coping mechanisms. The study also selected participants after graduation rather than during the program itself which does not exactly reflect the goal of the PICO question.	Level III, A (high quality)
4.	Faraz, A. (2016)	Systematic Review (Research)	Sample: Novice NPs Sample Size: 9 articles Setting: N/A	Several common themes were found in the literature search: the lack of clarity with NP's role and their role in practice, the lack of beneficial interdisciplinary relationships, intrapersonal doubt, and interpersonal opposition. Role ambiguity and its relevance to the IP are underlined as novice NPs struggled with this idea. The researcher highlights the importance of needed social support during	The review of literature included a combination of recent graduates, practicing NPs, and graduate students. This study discusses interventions rather than the measurement of IP.	Level III, B (good quality)

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				the transition from an RN to an NP. Support like mentorship and collaboration with other disciplines better integrate new NPs. Graduate programs should also include curriculum that encourages role transition and professional socialization interventions.		
5.	Fitzpatrick, S. & Gripshover, J. (2016).	Cohort Study (Research)	Sample: NPs and Physician Assistants (PAs) Sample Size: 250 Setting: University of Maryland Medical Center	In efforts to alleviate the stress associated with “transition shock” after graduation, Fitzpatrick and Gripshover (2016) attempt to facilitate an intervention to address “anxiety, insecurity, and exhaustion” (p. e419). These variables are associated with the IP. A support group was introduced at this facility to assist in the transition of new providers like NPs and Physician’s Assistants (PAs). This group gathered experienced and novice NPs and PAs to encourage discussion and debate regarding the issues that new providers encounter. Introduced topics included the necessity of encouraging	A survey was attempted to determine the introduced support group’s success. Only 2% (#5) responded which poorly supports the data collected. Also, the sample size was not limited to NPs. This study does not mention IP but does address variables associated with the IP.	Level III, C (low quality)

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				leadership, interdisciplinary support, and overall job satisfaction. This study highlights the need for more support by mentors and colleagues.		
6.	Hamric, A.B. & Hanson, C.M. (2003).	Expert Opinion (Non-research)	Sample: N/A Sample Size: N/A Setting: Master's Programs	This article underlines the importance of stepping beyond the current curriculum in preparing NP students as struggling with the IP can occur during the first year of practice. NP programs cannot center solely on the necessary clinical skills to diagnose, but must also include courses or seminars that underline role transition. Courses that discuss current issues surrounding APNs such as: differentiating the various specialties, role development, and organizational issues can assist in facilitating a healthier transition. Furthermore, the politics involved with healthcare and the APN's role should also be discussed.	This study is particular to master's programs. This study suggests solutions to the IP rather than the measurement of IP occurrence.	Level V, B (good quality)
7.	Hart, A. & Bowen, A. (2016).	Prospective Cohort Study	Sample: NPs Sample Size:	The research was instigated by the idea that preparedness, or the lack thereof, by new	The sample population was mostly master's	Level III, B (good quality)

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		(Research)	698 Setting: U.S.	NPs brought forth feelings of stress, anxiety, frustration, and inadequacy (Hart & Bowen, 2016, p. 545). Nearly half of the responders felt somewhat incompetent to their new role in their first year of practice. Most were interested in post-graduate residency programs if they had been available. Over 350 participants encouraged the need for transition assistance for new NPs. The results also indicated that increasing age or prior nursing experience did not assist in the role of a new NP.	prepared NPs and may not reflect those who are DNP educated. My research study will discuss all specialties, this study is limited to Family NPs. The overt discussion of IP is not present, but its variables are mentioned.	
8.	Jangland, E., Uhlen, P.Y., & Arakelian, E. (2016)	Qualitative Study (Research)	Sample: Graduate NP students Sample Size: 8 Setting: Surgical Site in Sweden	The results indicated three factors that influence new NP perception; coworker's reception of the NP role, self-actualization in a new role, and patient's acceptance of NPs as providers. NPs continue to have to explain themselves and their roles as prescribers. Participants encountered scenarios where other disciplines questioned their scope of practice. NPs expressed the inability to	This study was conducted in Sweden and therefore difficult to ascertain whether or not it is comparable to the US's curriculum for this program. This study does not mention IP but does discuss the idea of being between two roles as a nurse and a	Level III, B (good quality)

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				identify with one identity. The idea of being in limbo between roles was expressed. New NPs desired support from management in creating a culture where NPs are better accepted as the provider. The transition from an RN to an NP is difficult. A loss of professional identity and strain in the new role were felt. Self-reflection and mentors are necessary.	provider. My research underlines this idea with the foundation of the IP. Also, the study example included NPs, rather than NP students.	
9.	Kumar, S. & Jagacinski, C.M. (2005).	Cross Sectional Study (Research)	Sample: First year psychology students Sample Size: 135 Setting: University	Clance Imposter Phenomenon Scale was used with a Cronbach's alpha = 0.91. Men and women exhibit IP in correlation with one's anxiety and confidence in self-intelligence. There are evident gender differences. Females are more affected by Imposterism with more anxiety and lower confidence. The possibility that genders can influence how one copes can be applicable to a female dominated profession (i.e. NPs).	There are several limitations to this study. Undergraduate students were the sample size so the result's generalizability is not necessarily applicable. Furthermore, the sample size only had 42 women.	Level III, C (low quality)
	Schlossberg, N.K. (1981)	Expert Opinion	Sample: N/A	How one perceives transition depends on both internal and	This theory was not created specifically	Level V,

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10.		(Non-research)	Sample Size: N/A Setting: N/A	external factors. Schlossberg (1981) states that regardless of the transition itself, how one accepts this transition into his or her life will mirror the success of this new chapter. In addition, the available resources influence how one adapts or evolves. Factors such as personal and organizational support systems (or a lack thereof), the physical environment, psychosocial capability, gender, age, health status, ethnicity, socioeconomic status, and one's own beliefs all influence the success of transition.	for the realm of nursing. Schlossberg's article dates back to 1981 which can limit the study's applicability to the current generation of focus. This research does not discuss the Imposter Phenomenon but does emphasize variables that influence a positive or negative transition.	A (high quality)
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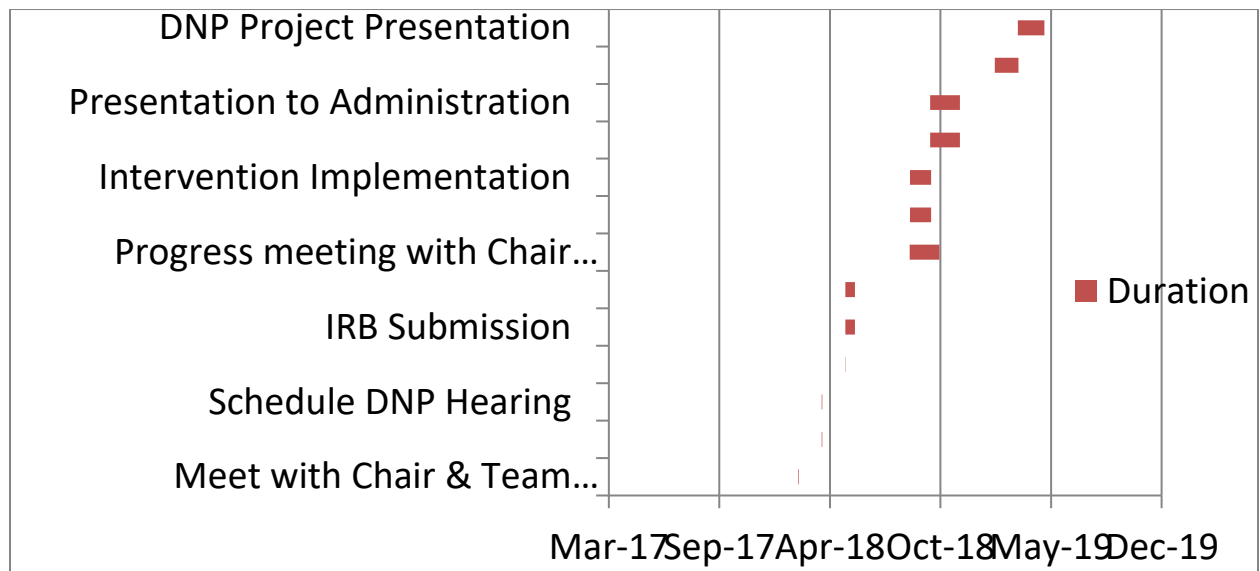
Appendix D

Project Timeline

<u>Task</u>	<u>Start Date</u>	<u>Duration (days)</u>	<u>End Date</u>
Meet with Chair & Team member to discuss topic	Feb-18	1	Feb-18
Progress meeting with Chair & Team member	Mar-18	1	Mar-18
Schedule DNP Hearing	Mar-18	1	Mar-18
DNP Hearing	May-18	1	May-18
IRB Submission	May-18	17	Jun-18
IRB Approval	May-18	17	Jun-18
Progress meeting with Chair & Team member	Sep-18	54	Oct-18
Participant Recruitment	Sep-18	38	Oct-18
Intervention Implementation	Sep-18	38	Oct-18
Data Analysis	Oct-18	54	Dec-18
Presentation to Administration	Oct-18	54	Dec-18

DNP Project Completion	Feb-19	43	Mar-19
DNP Project Presentation	Mar-19	48	May-19

Table D1

Gantt Chart of Project Timeline

Appendix E

Demographic Form



Demographics Sheet

This information will be decoded and grouped into ranges.

Please fill out the below.

Age:

Gender:

Completed number of years of Registered Nurse (RN) experience as of September 2018:

Current program specialty:

Completed number of clinical semesters as of September 2018:

Expected graduation date:

Appendix F

Clance Imposter Phenomenon Scale (CIPS)

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)

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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)

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Scoring the Clance Impostor Phenomenon Scale (CIPS)

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.

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Permission To Use the Clance Impostor Phenomenon Scale (CIPS)

Please find attached the requested Clance IP Scale and scoring instructions. This correspondence constitutes permission to use the scale. I request that on each CIPS you use/distribute, that you have the copyright and permission information printed on each page:

Note. From The Impostor Phenomenon: When Success Makes You Feel Like A Fake (pp. 20-22), by P.R. Clance, 1985, Toronto: Bantam Books. Copyright 1985 by Pauline Rose Clance, Ph.D., ABPP. Reprinted by permission. Do not reproduce without permission from Pauline Rose Clance, drpaulinerose@comcast.net, www.paulineroseclance.com.

This clause is already on the attached CIPS copy.

If you do not want to put the name of the test or book on the scale if it may affect your research, contact me and I can send you a version of the scale without that specific information yet retaining the clause, "Under copyright. Do not reproduce without the permission of Dr. Pauline Rose Clance."

For research purposes, I also request that you send a citation and abstract/results summary of your work to me when you are completed with your research to add to the IP reference list.

For IP presentation purposes, I request that you send me a brief summary (i.e., couple of sentences) of participant (and your own) feedback about the presentation in regard to how the Impostor Phenomenon was received.

Thank you again for your interest in the Impostor Phenomenon. Please e-mail me that you agree with these conditions. You may refer participants to my website (www.paulineroseclance.com) for any interest in viewing IP articles and for my contact information.

Best,

Pauline Rose Clance, Ph.D., ABPP

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(Clance, 1985, p. 20-22)

Appendix G

Consent Document



TITLE OF STUDY: The Perception of Impostorism

Principle Investigator: Stephanie Kim, BSN, RN, ONC

Hello! You are being asked to participate in a research study that is being conducted by Stephanie Kim, a DNP FNP- Primary Care student at Rutgers University.

Purpose of the Study:

The purpose of this study is to determine whether or not BSN to DNP students are experiencing Impostorism.

What is Impostorism?

Impostorism is a theory created by Dr. Pauline Rose Clance that describes highly educated people with feelings of stress, anxiety, and doubt with regards to their success (Clance, 1985).

You will be one of approximately 92 subjects.

What will be done?

Once this consent is completed, a demographics survey will be provided with a 20 question Likert survey. This is a quick survey and should take no longer than 15 minutes of your time. All information and demographics will be coded to provide anonymity. Participation is completely voluntary. If you have any questions or hesitations, please let me know. The only alternative to this study is not to participate.

Risks or Discomforts:

There is no risk to you or your grades in the DNP program. If you feel uncomfortable with a question, you can skip that question or withdraw from the study altogether. If you decide to quit at any time before you have finished the questionnaire, your answers will not be recorded. If you become distressed by your score, please let me know. A referral for Student Services can also be provided for you.

Benefits of this Study:

There is no direct benefit to you for participating in the study. You will have the optional opportunity to score your own results with the scoring sheet attached. Once data collection is complete, the results will be provided to the Rutgers nursing faculty and administration. Participation promotes an increased awareness to Rutgers faculty to better understand how we

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feel as DNP students in this program. There is a lack of awareness regarding how we feel as BSN to DNP students, this information will also be disseminated nationally.

Confidentiality:

Your responses will be confidential. All identifiers will be removed and grouped into ranges. The paper/digital data will be stored in a secure computer and/or hard copy will be stored in a locked filing cabinet once it is entered. The researcher will not see your individual survey responses and the results. We will not collect any personal identifying information about you and all your answers will be confidential. Once the project is complete, the data will be destroyed according to Rutgers University policy.

Compensation:

There is no monetary compensation but students will be provided small gift bags for their time.

Withdrawal:

Participation is completely voluntary; you can withdraw at any time. If you do not want to continue, you may turn in a blank survey. You may also choose to skip any questions that you do not wish to answer.

Application of results:

The results will be provided to Rutgers nursing faculty and administration in a presentation. The results will be published in an academic journal to further disseminate the information.

Contact Information:

If you have answer concerns or questions about this research study, please contact the Principal Investigator (PI) - Stephanie Kim at syk40@sn.rutgers.edu

If you wish to also read the study at its completion, please keep the email address above.

If you have any questions about your rights as a research subject, please contact the IRB director at (973)-972-3608, Newark.

By beginning the survey, you acknowledge that you have read this information and agree to participate in this research, with the knowledge that you are free to withdraw your participation at any time without penalty.

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Appendix H

Sample Flier for Student Recruitment



RESEARCH STUDY:

The Perception of *Impostorism*

Who: DNP students - Class of May 2019/ 2020

Those within: Adult-Gerontology Acute Care, Adult-Gerontology Primary Care, Family Nurse Practitioner (FNP) - Primary Care, FNP in Emergency Care, Psychiatric/Mental Health Nurse Practitioner, and Women's Health Nurse Practitioner

What: Come fill out a 15 minute questionnaire

PURPOSE: To determine whether or not BSN to DNP students are experiencing Impostorism.

When: September 4-December 12, 2018

Where: The Stanley Bergen Building-

The lobby, 6th floor seating area, Student Lounges,
GA hallways

For more information: Stephanie Kim, RN
Principal Investigator - syk40@sn.rutgers.edu

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Appendix I

Descriptive Statistics

Table I1

Descriptive Statistics for Age

Descriptives				
			Statistic	Std. Error
Ages in years	Mean		32.4783	.72206
	95% Confidence Interval for Mean	Lower Bound	31.0440	
		Upper Bound	33.9126	
	5% Trimmed Mean		31.7295	
	Median		31.0000	
	Variance		47.967	
	Std. Deviation		6.92579	
	Minimum		25.00	
	Maximum		60.00	
	Range		35.00	
	Interquartile Range		6.00	
	Skewness		1.880	.251
	Kurtosis		4.138	.498

Table I2

Descriptive Statistics for Years of Nursing Experience

Descriptives				
			Statistic	Std. Error
Years of nursing experience	Mean		7.45	.571
	95% Confidence Interval for Mean	Lower Bound	6.31	
		Upper Bound	8.58	
	5% Trimmed Mean		6.68	
	Median		6.00	
	Variance		30.030	
	Std. Deviation		5.480	
	Minimum		1	
	Maximum		35	
	Range		34	
	Interquartile Range		3	
	Skewness		2.920	.251
	Kurtosis		10.321	.498

Table I3

Descriptive Statistics for Completed Clinical Semesters as of September 2018

Descriptives			Statistic	Std. Error
Clinical semesters completed as of September 2018	Mean		1.75	.179
	95% Confidence Interval for Mean	Lower Bound	1.40	
		Upper Bound	2.10	
	5% Trimmed Mean		1.60	
	Median		2.00	
	Variance		2.937	
	Std. Deviation		1.714	
	Minimum		0	
	Maximum		8	
	Range		8	
	Interquartile Range		3	
	Skewness		.828	.251
	Kurtosis		1.002	.498

Table I4

Descriptive Statistics for Gender

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	6	6.5	6.5	6.5
	Female	86	93.5	93.5	100.0
	Total	92	100.0	100.0	

Table I5

Descriptive Statistics for Degree Specialty

		Degree specialty			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PNP-Primary Care	53	57.6	57.6	57.6
	PNP-Emergency	7	7.6	7.6	65.2
	AG-Primary Care	20	21.7	21.7	87.0
	AG-Acute Care	7	7.6	7.6	94.6
	MentalHealth	4	4.3	4.3	98.9
	Women's Health	1	1.1	1.1	100.0
	Total	92	100.0	100.0	

Table I6

Descriptive Statistics for Expected Graduation Dates

		Expected graduation Date			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	May 2019	50	54.3	54.3	54.3
	May 2020	42	45.7	45.7	100.0
	Total	92	100.0	100.0	

Table I7

Descriptive Statistics for Cumulative Survey Scores

		Descriptives		Statistic	Std. Error
Cumulative survey score	Mean			59.88	1.386
	95% Confidence Interval for Mean	Lower Bound		57.13	
		Upper Bound		62.63	
	5% Trimmed Mean			59.81	
	Median			58.00	
	Variance			176.700	
	Std. Deviation			13.293	
	Minimum			30	
	Maximum			92	
	Range			62	
	Interquartile Range			18	
	Skewness			.065	.251
	Kurtosis			-.340	.498

Appendix J
Statistical Analysis

Table J1

Statistical Analysis of Age and Cumulative Survey Scores

Correlations			Ages in years	Cumulative survey score
Spearman's rho	Ages in years	Correlation Coefficient	1.000	.050
		Sig. (2-tailed)	.	.636
		N	92	92
	Cumulative survey score	Correlation Coefficient	.050	1.000
		Sig. (2-tailed)	.636	.
		N	92	92

Table J2

Statistical Analysis of Years of Nursing Experience and Cumulative Survey Scores

Correlations			Cumulative survey score	Years of nursing experience
Spearman's rho	Cumulative survey score	Correlation Coefficient	1.000	.018
		Sig. (2-tailed)	.	.863
		N	92	92
	Years of nursing experience	Correlation Coefficient	.018	1.000
		Sig. (2-tailed)	.863	.
		N	92	92

Table J3

*Statistical Analysis of Completed Clinical Semesters and Cumulative Survey Scores***Correlations**

		Cumulative survey score		Clinical semesters completed as of September 2018
Spearman's rho	Cumulative survey score	Correlation Coefficient	1.000	-.437**
		Sig. (2-tailed)	.	.000
		N	92	92
	Clinical semesters completed as of September 2018	Correlation Coefficient	-.437**	1.000
		Sig. (2-tailed)	.000	.
		N	92	92

**. Correlation is significant at the 0.01 level (2-tailed).

Table J4

*Statistical Analysis of Genders and Cumulative Survey Scores***Report**

Median

Gender	Cumulative survey score
Male	57.50
Female	58.00
Total	58.00

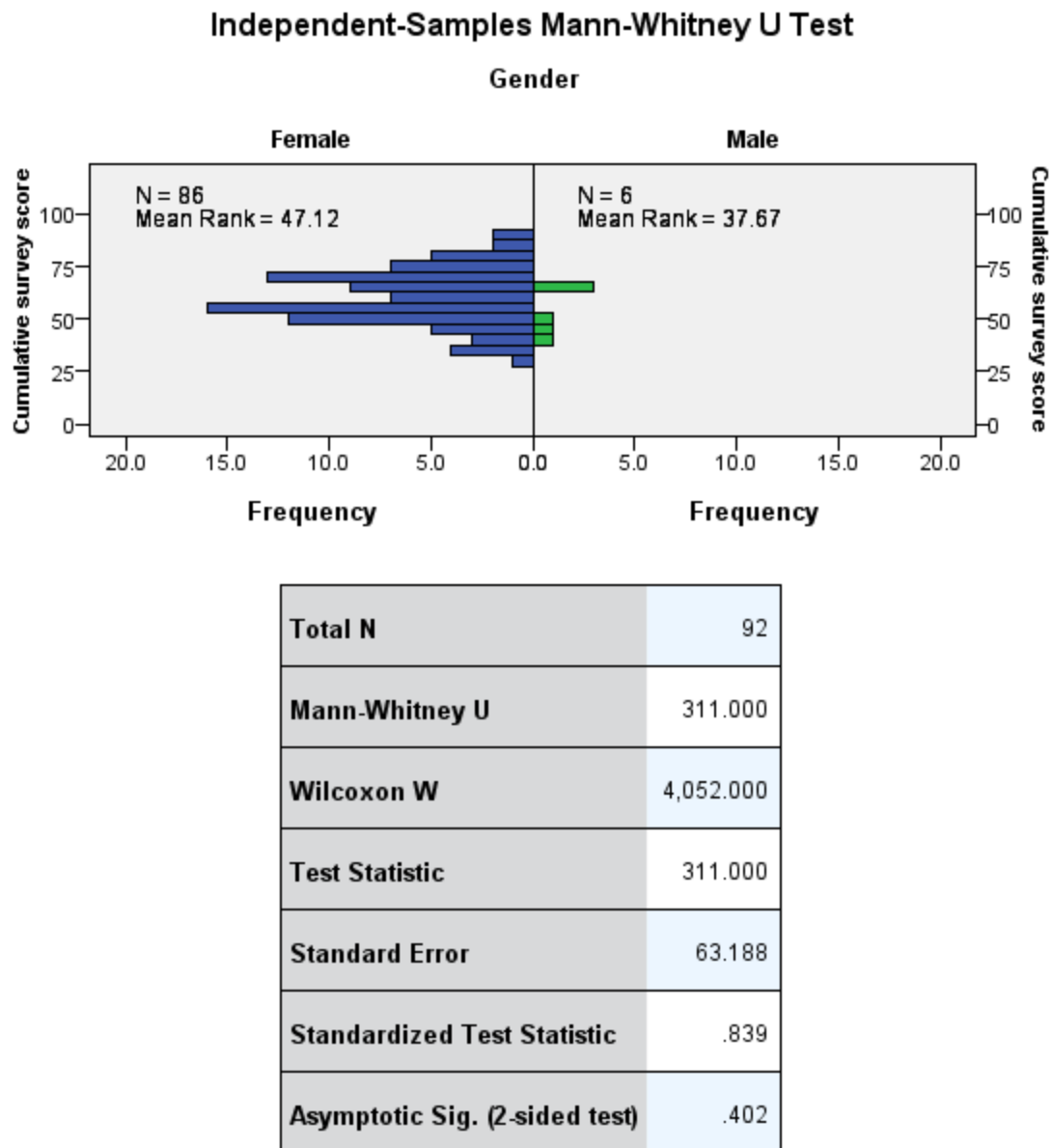
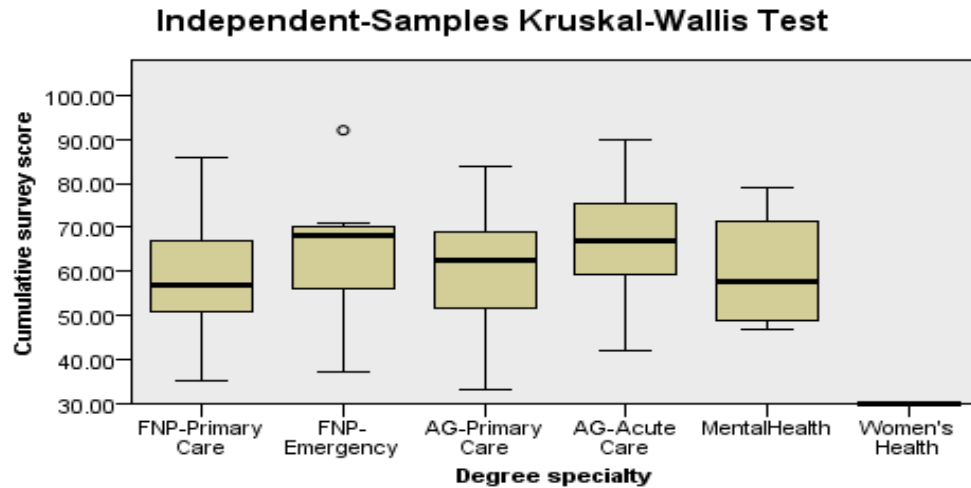


Figure 1. Independent Mann Whitney U test for Genders and Cumulative Survey Score

Table J5

Statistical Analysis of Degree Specialties and Cumulative Survey Scores

Report	
Median	
Degree specialty	Cumulative survey score
FNP-Primary Care	57.00
FNP-Emergency	68.00
AG-Primary Care	62.50
AG-Acute Care	67.00
MentalHealth	57.50
Women's Health	30.00
Total	58.00



Total N	92
Test Statistic	5.438
Degrees of Freedom	5
Asymptotic Sig. (2-sided test)	.365

1. The test statistic is adjusted for ties.
2. Multiple comparisons are not performed because the overall test does not show significant differences across samples.

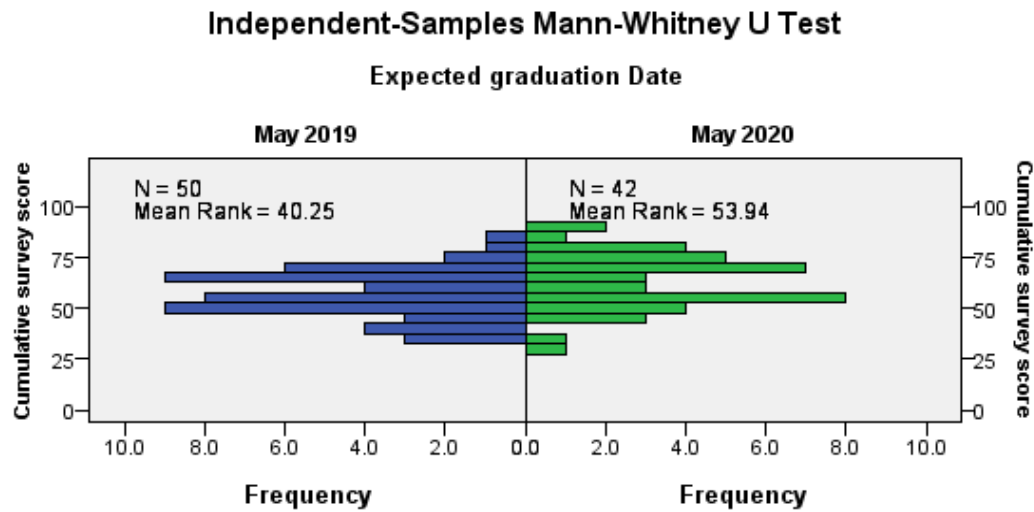
Figure 2. Independent-Samples Kruskal-Wallis test for Degree Specialty and Cumulative Survey Score

Table J6

*Statistical Analysis of Expected Graduation Dates and Cumulative Survey Scores***Report**

Median

Expected graduation Date	Cumulative survey score
May 2019	55.00
May 2020	65.50
Total	58.00



Total N	92
Mann-Whitney U	1,362.500
Wilcoxon W	2,265.500
Test Statistic	1,362.500
Standard Error	127.473
Standardized Test Statistic	2.452
Asymptotic Sig. (2-sided test)	.014

Figure 3. Independent Mann Whitney U test for Expected Graduation Dates and Cumulative Survey Score

