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Partnership for Development: A Peer Mentorship Model for PhD Students

Allison A. Lewinski, MPH, BSN, RN[a], **Tara Mann, BSN, RN**[a], **Dalmacio Flores, PhD, ACRN**[a,b], **Ashlee Vance, MA, RN, RNC-NIC**[a], **Janet Prvu Bettger, ScD**[a], and **Rachel Hirschey, BSN, RN**[a]

[a]Duke University School of Nursing, DUMC 3322, 307 Trent Drive, Room 3080, Durham, NC 27710

Abstract

Formal mentoring relationships socialize Doctor of Philosophy (PhD) students to their current and future roles as nursing scholars. Despite formal mentoring, some students may desire or benefit from additional mentoring in an informal setting. Informal mentoring complements the one-to-one relationship students develop with a primary faculty mentor or dissertation chair. This manuscript describes the development, implementation, and evaluation of a student-driven, peer mentorship model, titled Partnership for Development. This small group, peer mentorship model was implemented in a PhD program at a School of Nursing during an academic year. Five student peer facilitators organized a total of 32 PhD students, 2 post-doctoral associates, and invited 5 faculty to participate. Data includes pre- and post-implementation surveys completed by the students and peer facilitator field notes. Student reported post-participation benefits included: getting to know faculty in an informal setting ($n = 6$), socializing with students from other cohorts ($n = 6$), and obtaining a sense of camaraderie with other PhD students ($n = 5$). We recommend peer mentorship for other PhD programs as a way to socialize PhD students into the role of nurse scientist and assist students during their tenure as a PhD student.

Keywords

Mentorship; Social Support; Peer Group; Nursing Students; Nursing Graduate Education; Nursing Doctor of Philosophy; Socialization

Introduction

Formal and informal mentoring by faculty and peers socialize doctoral (PhD) students at a School of Nursing into the academic, research-focused environment and their role as they become future nurse scientists (Fang, Bednash, & Arietti, 2016; Goodfellow, 2014; Nehls,

Corresponding author: Allison Lewinski; DUMC 3322, 307 Trent Drive, Room 3080, Durham, NC 27710; Phone: (919) 684-9198; Fax: (919) 684-9350; allison.lewinski@duke.edu.
Present address: University of Pennsylvania School of Nursing, 418 Curie Blvd, Philadelphia, PA 19104

Barber, & Rice, 2016). These mentoring relationships are critical in creating future nursing scholars who serve as stewards of the discipline, helping them to smoothly transition from a PhD student role to a faculty role, allowing them to be successful as nurse scientists following graduation, and achieve national standards set forth to advance the nursing profession (American Association of Colleges of Nursing, 2010; Gill & Burnard, 2008; Institute of Medicine, 2011; Sawatzky & Enns, 2009). Additionally, the nurse faculty shortage will be lessened by increasing the number of PhD prepared nurses (American Association of Colleges of Nursing, 2014). Research estimates that almost half of PhD prepared nurses leave academia following graduation (National Research Council (US) and Institute of Medicine (US) Committee on Opportunities to Address Clinical Research Workforce Diversity Needs for 2010, 2006), and that a larger portion of younger PhD prepared nurses choose careers other than academia (American Association of Colleges of Nursing, 2005, 2015), contributing to the nursing faculty shortage. Increasing the amount of PhD prepared faculty in academia is paramount; these faculty will play a large role in teaching and ushering the next generation of nurses who will advance the care of patients at the bedside, forge new research, and continue to expand the discipline at large.

An environment conducive to personal and professional growth during one's PhD program is created through positive interactions with peers and faculty. Positive interactions include 'checking-in', providing advice, being present, and addressing the dynamic nature of challenges and successes that occur throughout the course of a PhD program (Cohen, 2011; Fang et al., 2016; Pancheri et al., 2013; Smith & Delmore, 2007). Students feel supported and socialized into the professional academic community when faculty model teaching, scholarship, and service to the profession, along with peers who provide mentoring and guidance on role transition (Armstrong, McCurry, & Dluhy, 2016; Fang et al., 2016; Goodfellow, 2014). Notably, the lack of good mentorship becomes apparent when students report that their personal or academic community is non-supportive. Students in an unsupportive community often feel socially isolated from peers and family, struggle with changing personal relationships, and often report having a poor relationship with one's primary mentor due to lack of communication, disparate personalities, or by having an unresponsive mentor (Cohen, 2011; Nehls et al., 2016; Pancheri et al., 2013). Additionally, those students who lack a support system or a good relationship with any faculty mentor during the duration of their PhD degree program are at increased risk for program withdrawal, greater time to degree completion, and negative psychosocial outcomes (e.g., anxiety, depression, stress) (Cohen, 2011; Nehls et al., 2016; Pancheri et al., 2013). Therefore, identifying methods to create and sustain a community that is both personally and professionally supportive during challenging times and celebratory during the good times is essential to ensuring the success of students while obtaining their PhD.

Mentoring models exist in graduate programs to provide students with personal and professional support and guidance during their programs. These models can be one-to-one (e.g., peer to peer, study partner, primary faculty mentor to student), group (e.g., study groups), one-to-many (e.g., one leader to many students), and may or may not include a faculty member. Formal mentorship models are those that have become part of the infrastructure of a degree program and are incorporated into the core curricula. A prime example of a formal mentoring relationship in a PhD program is between student and their

dissertation chair; usually this relationship lasts for all, or the majority of, a student's degree program. Another example of a formal mentoring model is the Advisory Dean mentoring model typically located in Schools of Medicine (Macaulay et al., 2007; Puckett, Graham, Pounds, & Nash, 1989; Swan-Sein, Mellman, Balmer, & Richards, 2012). This model provides opportunities for faculty and students, typically within the same year, to connect in a smaller group setting to discuss relevant topics, and enhance their professional development during their medical school training at regularly scheduled times (Macaulay et al., 2007; Murr, Miller, & Papadakis, 2002; Sastre et al., 2010; Swan-Sein et al., 2012). Typically, these groups include many students and one faculty member who provide support, guidance and information.

Informal mentoring models are often groups of students who come together to provide support, friendship, and guidance during school (Pancheri et al., 2013; Smith & Delmore, 2007). For example, Pancheri et al. (2013) noted that a collegial support group of students in their dissertation phase at a School of Nursing provided both social and professional benefit. Students met in a chosen location, not necessarily at their school, and discussed both personal and professional topics. One commonality between the formal and informal mentoring groups is the homogeneity of the members as most groups typically contain students in the same stage in the degree program (e.g., dissertation phase, first year of medical school). However, students gain insight about life as a PhD student, obtain support and advice on program requirements, and discuss challenges presented during dissertation research in informal interactions with peers in their program. While a shared experience may be helpful, we believe that a heterogeneous peer mentoring structure composed of students in different levels of the professional degree program may be of benefit to PhD students. Given the usefulness of both types of mentoring models, both are necessary to establish and create a supportive and collaborative environment within a PhD program wherein students feel as though they have the ability to succeed to their greatest potential. However, informal mentoring by its nature is less often designed with a sustainable organizational structure.

The purpose of this manuscript is to describe the development, implementation, and evaluation of a student-led, peer mentorship model for PhD students and post-doctoral associates in a School of Nursing. The mentorship model titled, Partnership for Development (POD), successfully provided professional and personal socialization and guidance during the 2015–2016 academic year.

PODs Program Design and Implementation

Setting—PODs is a peer mentorship model implemented in a PhD Program at a School of Nursing. All students currently enrolled in the program have a Bachelor of Science in Nursing and several have a Master of Science in Nursing or in another related discipline. The style of this PhD program is an on-campus experience with full-time coursework for the first two years. Students are funded for up to five years, and are encouraged to seek outside funding to support research. Years one and two consist of core nursing research courses and electives of the student's choice. Years three and beyond include additional courses to supplement one's program of research, engagement in pilot research, primary data collection, and completion of the dissertation. This PhD community consists of domestic

and international PhD students, postdoctoral associates, and PhD program faculty, with diverse research interests, and academic backgrounds, clinical experiences, and cultural knowledge. A total of 34 participants (32 students representing five cohort years and two post-doctoral associates) were enrolled in the peer mentoring model at the beginning of the academic year. Additionally, five faculty members were invited to participate in the PODs.

Rationale—Student leaders created PODs to complement the current faculty mentorship that students receive in our program via their assignment to a primary advisor or mentor. Our PhD program has two peer-elected student representatives that attend monthly PhD Program Committee meetings. These two students communicate student comments, concerns, and suggestions regarding the PhD program to faculty members on a monthly basis. Prior to the implementation of PODs, several students expressed a desire for additional mentoring to the PhD Program Committee student representatives. At that time, our program had two mentoring systems in place: (1) a primary faculty mentor who guides the student from admission until graduation and who typically becomes the Chair of the dissertation committee; and (2) a peer mentor who is a fellow PhD student a year or two ahead in the program. Despite the presence of these two systems, students desired information and perspectives from other sources (e.g., students in other cohorts, faculty) and advice regarding a multitude of formal (e.g., dissertation advice, grant writing) and informal issues (e.g., work-life balance) about their role as a PhD student and beyond.

Program development and implementation—A mentoring workgroup was developed to address student concerns in summer 2015. This group included four students and two faculty mentors with the goal of assessing the overall mentorship system within the PhD program. The workgroup identified best mentoring practices and programs within our University and across the nation in both Schools of Nursing and other disciplines. The work group led a role-playing session with faculty at a PhD faculty meeting and presented vignettes focused on common student mentoring issues, which led to a discussion about student concerns. The workgroup presented the idea of a student-led, small group mentorship program at this meeting and through discussion, all faculty members came to agreement and were in support of creating PODs.

With the PhD Program administration and faculty support, the workgroup outlined the structure of the PODs program. Five diverse PODs were created with a random spread with regards to gender, race/ethnicity, country of origin, stage in the program, and when possible, research interests. PODs were purposefully kept small in order to facilitate personal interactions with the hope of creating more intimate connections. Ideally each POD contained at least one student from each cohort year including a post-doctoral associate, a faculty member, and a peer facilitator.

Peer Facilitators: Each student member of the workgroup (DF, RH, AL, and TM), all PhD candidates, became a peer facilitator. An additional PhD student (AV) was invited to be a peer facilitator for the fifth group. The workgroup purposefully designed the PODs program to be informal and casual. However, the workgroup stipulated that PODs: (1) were to meet at least once a month during the academic year; (2) student and faculty attendance was not required but strongly encouraged; (3) the peer facilitator would coordinate the meetings

based upon the faculty and student schedules; (4) meetings did not have a set agenda, and any topic could be discussed; (5) each individual PODs group determined the meeting location, date, and time; (6) all conversations within a PODs meeting were confidential; and (7) faculty would not share information discussed in PODs with the school administration unless agreed upon by all PODs members. Peer facilitators contacted their respective groups in August 2015 and sent an informational brochure that described the PODs program in detail. The first meetings were in September 2015 and the PhD program provided dessert and non-alcoholic beverages.

Faculty Members: The students in the workgroup identified five faculty members who were members of the PhD program faculty to be invited as PODs faculty members. These faculty members were invited to participate in PODs if a student nominated them, were on-campus, affiliated with the PhD program, and did not serve in an administrative or leadership role (e.g. Academic Dean, Program Director). All five invited faculty agreed to participate. PhD program faculty perspectives on the selection process were not solicited.

PODs Members: PODs group members beyond the faculty member and peer facilitator included pre-doctoral students and post-doctoral associates stratified by gender, race/ethnicity, year in the program, and when possible, and research interest. Additionally, students were not placed in a PODs group led by their primary faculty mentor, or with their PhD student mentor.

Evaluation

Sample—Our sample included 39 participants in total: 32 pre-doctoral students, 2 postdoctoral associates, and 5 faculty members at a School of Nursing in North Carolina during the 2015–2016 academic year. Each of five PODs groups contained among 6 to 8 participants across all levels of the program.

Instruments—A pre-post survey was used to assess the peer mentorship model's contribution to a supportive and collaborative community in the PhD program. More specifically, the purpose of the pre-implementation survey was to understand pre-doctoral student and postdoctoral associate perceptions surrounding the development and implementation of the PODs program prior to program initiation. The purpose of the post-implementation survey was to understand how pre-doctoral student and post-doctoral associate perceptions changed over the course of the academic year, to evaluate the PODs program, and to determine if this peer mentorship program should be continued in upcoming years. The students and faculty in the workgroup developed the survey questions after a review of relevant literature. The pre-implementation survey consisted of five questions and there were six questions at post-implementation, each including both Likert-scale and open-ended questions. Face-validity of the surveys was ensured through an iterative process involving members of the workgroup and cross-checking with each other. The surveys were administered online via Qualtrics (Qualtrics, 2015). Each survey took approximately five minutes to complete. The University's Institutional Review Board approved the Qualtrics survey and approach to evaluation created by the workgroup.

Prior to starting the survey, respondents were presented with a waiver of signed consent and a paragraph that disclosed the risks and protections of the study. Due to the limited number of participants and to ensure anonymity, no demographic variables or personal identifiers were collected. After agreeing to participate, each participant completed the survey at any time prior to his/her first PODs meeting. Table 1 gives an overview of the pre- and post-implementation survey questions. Questions 1 through 3 on the pre- and post-implementation were rated on a 5-point Likert scale ranging from 1 = “strongly agree” to 5 = “strongly disagree.” Questions 4 and 5 on the pre-implementation, and questions 4 through 6 on the post-implementation surveys were short response, open-ended questions.

In addition to the pre- and post-implementation surveys, the student peer facilitator recorded attendance at each PODs meeting. The facilitator also recorded details of each monthly PODs discussion. These qualitative field notes did not include any identifying data, but rather provided a description of the meeting.

Procedures—PODs members were asked to complete an anonymous pre-implementation survey in September 2015 and a post-implementation survey in April 2016. The pre-implementation assessment email was sent to all of the pre-doctoral students and post-doctoral associates in the program. This email included a brief description of the study and a URL for the online Qualtrics survey. The post-implementation email stated that only individuals who participated in the PODs program should complete the survey. This recruitment approach was chosen to ensure a comprehensive overview of participants’ experiences with the PODs program. Completing the survey was optional. A reminder email was sent one week after the start of the survey at the pre- and post-assessment time points. The survey remained open for two weeks.

Data Analysis Plan

The student workgroup members downloaded the pre- and post-survey data from Qualtrics. SPSS (IBM Corp., 2015) was used to analyze survey data. Peer facilitator field notes provided data on PODs attendance and meeting occurrence. These field notes were constructed immediately following each meeting, and written in collaboration with the peer facilitator and faculty member jointly. Descriptive statistics were calculated to compare pre- and post-implementation survey responses. Qualitative data collected from open-ended survey questions and post-meeting notes written by the peer facilitator for each PODs group were analyzed using Atlas TI as well as hand-coding. Because of the exploratory nature of this project, a priori codes were not developed prior to coding. Two authors (DF, AL) independently coded textual data, and validity was assured by comparing definitions, codes and themes. Emergent codes and themes were discussed as the textual data was read and reviewed.

Results

Survey Data

In the 2015–2016 academic year, each PODs group met between 3 and 7 times. Average attendance rate over the year was 79%. Reasons for missed participation include conference

attendance, personal commitments, and schedule conflicts in addition to attending the wrong PODs group, needing to complete school work, and being on vacation. On four occasions participants attended via telephone. A summary of attendance of each PODs group is detailed in Table 2.

The pre-implementation survey was completed by 79% of PODs participants ($n = 26$). The post-implementation survey was completed by 55% of PODs participants ($n = 18$). Descriptive statistics of survey responses are detailed by item in Table 3. All item means ranged from 3.6 – 3.9 using a five-point Likert scale in which 3 indicates neither agree nor disagree. The most common response for all items was 4, which indicates agree.

Open-ended Survey responses and Facilitator Field Notes

Content Findings: PODs Function—The monthly PODs meetings deliberately created the time and space with the clear purpose of fostering mentoring among PhD students and PODs faculty. According to the students and peer facilitators, the monthly PODs meetings functioned to: clarify questions about the PhD program, socialize its members to professional researcher roles, offer ways they could survive and thrive while in the program, and orient them to their future careers after obtaining the PhD. Each function is described in more detail below and in Table 4.

PhD Program Clarification: The first function gathered from the post-PODs assessment and facilitator memos details how this peer mentoring model provided a venue where members could have their school-related questions addressed. While all the students had general ideas about the structure of the PhD program, students had varying levels of uncertainty about the minutiae involved in each program milestone. PODs became a safe space for the members to bring all of their questions and have them clarified by peers who have gone through each stage. While details regarding program expectations were stated in the PhD program handbook, PODs provided specifics and case examples not elucidated in that document.

Socialization to the Researcher Role: According to student members, PODs addressed topic areas beyond what was provided in the student handbook. PODs meetings became a venue for members to hear about and understand the multiple roles they assume as pre-doctoral and early career investigators. Discussions that socialized members to their roles as researchers included how to form professional relationships and collaborate with others in a study team, how to identify appropriate conferences to attend and navigate the abstract submission process, and how to troubleshoot issues that may arise when conducting pilot studies. In one PODs group, for example, one meeting discussed how research questions develop and evolve into a working grant and dissertation project. Students asked questions about how to create an appropriate committee and where to look for coursework to supplement the core curricula in order to address their research questions and gain research skills.

Surviving and Thriving: PODs proved to be a needed respite where students could unload their concerns, share their stress and seek tips on how to manage competing demands on

their time. Achieving a sense of work and life balance was a priority topic discussed in all PODs and attendance in the meetings enabled its members to share their concerns and solicit ways to resolve these matters. Unlike the first two functions, which were about academic work and professional roles, this third component was more focused on addressing an individual's quality of life, mental health, and for some, maximizing individual potential while pursuing a terminal degree. Examples of topics in this category were sharing time management skills and tips on productivity, and addressing family-related concerns while a student in PhD program. Similarly, PODs meetings functioned as a way to check on members' morale and celebrate individual members' achievements. PODs became a mechanism for keeping its members appraised on students' progression.

Faculty Interaction and Orientation to Life beyond the PhD: Due to the decision to assign a faculty member to each PODs group, there were regular opportunities for students and faculty to interact. The presence of a faculty member did not inhibit discussion during meetings. The peer facilitators noted that as the year progressed, the students became more comfortable in the meetings, and the faculty member became a part of the group rather than a superior. Particularly, open ended responses to the post-implementation survey indicate that participants appreciated getting to know faculty in a casual setting ($n = 6$). With confidentiality guaranteed, students were able to hear faculty perspective on sensitive issues students wanted to consult them on. Further, with these faculty members' experience, PODs became a vehicle for members to be introduced to potential post-PhD career options. Many conversations focused on members' immediate prospects including the necessity of postdoctoral training, considerations essential for the job hunt, and even demystifying the tenure process.

Process Findings: Programmatic Themes—Three distinct themes emerged concerning the PODs roll out and progression. These are the pre-conceived notions about PODs and context-building work by facilitators, the logistical challenges observed, and the eventual buy-in from members.

Pre-conceived Notions and Context-Building: Results from the pre-implementation survey and memos written by student facilitators show that the majority of students viewed PODs as an opportunity to socialize with students from other cohorts ($n = 6$). Most of the students imagined that they would be able to refer to other PODs group members for guidance. A few identified PODs as a way to build camaraderie to boost student morale during stressful times ($n = 5$) while a few expressed skepticism at the idea of yet another regular meeting they would be mandated to attend ($n = 3$).

From the perspective of facilitators, initial meetings required them to establish a context of PODs as a free-speech zone, which encouraged open communication within a structure of confidentiality. Facilitators endeavored to establish group rapport by soliciting topics members wanted to talk about, reassuring members that these spaces were dedicated to free time, and reiterating the unstructured nature of meetings that could be catered to its members' concerns at any particular time. The PODs peer facilitators created the context of the meetings by repeatedly stressing that meetings were confidential, and casual safe spaces with personalized attention. The facilitators fostered a sense of community by "checking-in"

with other members at the monthly meetings, celebrating life events or program milestones, and providing advice and feedback. One facilitator stated, “We did a check-in to see how everyone was doing and talked about the good things that happened over the past month.” Other facilitators stated their group began meetings with a general question (e.g., what do you want out of this meeting) or joking/laughing about humorous topics.

Logistical Challenges: There were two recurring challenges. First, much of the initial work required facilitators to schedule PODs meetings that were suitable for most of their members who were at varying levels in their doctoral training. Given the variety of each PODs members’ on- and off-campus commitments (e.g., electives at another institution, conference attendance, or the need to be out in the field for data collection), complete attendance of all members each month proved elusive. However, the majority of the students gave notice whenever they expected to miss a meeting, which allowed the facilitators to explain or note their absence. A few of the students noted frustration with the regular Doodle polls they received which, for them, seemed to force members to the difficult task of being present for an upcoming meeting ($n = 5$).

The second challenge centered on the reliance on student facilitators to initiate conversations during the initial PODs meetings. Due to the agenda-free nature of the meetings, there was an effort by facilitators to initiate conversations and update their group about activities they engaged in since they last met. This role modeling was often needed to build the discussion.

Members’ Eventual Buy-In: As the academic year progressed and students became more accustomed to the PODs, there was an eventual buy-in from most of the students. While one PODs group continued to struggle with building group rapport, the other four PODs saw an increase in members’ active participation. In fact, several of the facilitators had to miss meetings themselves which did not deter members from holding the scheduled meetings with their faculty members. Group cohesion in one PODs was evident from members’ enthusiasm to bring food to share during their meetings while another PODs kept meeting beyond the hour-long format until they covered all topics they wanted to discuss.

Members reported the PODs meetings were a non-judgmental zone in which they could share frustrations, seek advice, and clarify program and professional expectations. One student stated they benefitted from the comfortable environment by, “getting to check in on others, sharing views, asking questions from people who have done it before, and having a safe space to vent.” Additionally, one facilitator stated, “Students mentioned at the end [of the meeting] that they are findings PODs very beneficial and that we do feel this is a safe space to talk about ‘anything.’” Overall, students found PODs to be an informal venue for celebrations and discussions, as one student stated they benefitted by, “getting to know faculty in a personable way and engaging with peers in a social setting, yet also having time to discuss academic rewards and challenges.” The sharing of achievements and challenges created solidarity among students.

Despite the gradual acceptance of the program by the majority of the students, a few of the student facilitators noted the ongoing effort required to make PODs meetings livelier. Different venues for the meetings were attempted, including walking through the university

garden, meeting at the school atrium, or changing the rooms for each meeting. Weather constraints both in the fall and spring semesters prevented more outdoor meetings. From the students post-survey data, suggestions about how to improve the PODs program included making meetings more casual/social ($n = 4$), offering food at meetings ($n = 3$), rotating PODs members each year ($n = 1$), having fewer people in each PODs group ($n = 1$), and having planned topics for discussion known prior to the meeting ($n = 1$). Three participants recommended that PODs continue as designed.

Discussion

The PODs mentorship model was a novel approach to socializing PhD students into their current and future roles as nurse scholars that complements the formal mentoring relationships currently in place. The PODs model proved to be a welcome addition to the program by creating a positive and beneficial mentoring program for PhD students in a School of Nursing. Survey responses indicated that students thought positively about the PODs model before and after implementation, and believed themselves and other students would benefit from their participation. Pre-and post-implementation survey assessments indicated that expectations were met in addressing the student's desire to have more mentorship opportunities. The open-ended responses from students indicated they valued the interactions with faculty and peers in this informal, small group setting. Additionally, peer facilitators noted that meetings became collaborative and supportive over time. Overall, students thought favorably about their participation in the PODs.

The PODs mentorship model addressed a gap in mentoring programs by structuring informal interactions and creating a venue for these conversations to happen on a regular basis. The PODs program shares similar results with the Pancheri et al. (2013) study of a collegial peer support group of women completing a PhD in Nursing. Pancheri et al. (2013) stated that group members bonded over time, formed friendships, discussed scholarly activities (e.g., dissertation work, research challenges), and time management in addition to addressing challenges and providing advice in a judgment free zone. However, this collegial support group was all women at the same stage in the degree program; no information was provided on race or nationality. This is where the PODs model differs in that each PODs group was purposively created to be diverse in age, race/ethnicity/nationality, dissertation topics, and gender in order to provide a fully collaborative environment representative of the nursing profession. Additionally, the informal nature of PODs reflects previous success of dissertation peer groups for PhD Nursing students as other literature states the informal meeting locations, with refreshments, lent to the casual atmosphere and relaxation of peers (Pancheri et al., 2013; Smith & Delmore, 2007). While the majority of PODs meetings occurred in the School of Nursing, several PODs groups met at other locations, and several groups brought food and refreshments.

The PODs model responded to calls for new and innovative mentoring programs for PhD students in Schools of Nursing (Cohen, 2011; Fang et al., 2016; Nehls et al., 2016). We believe our model is innovative as we strategically created groups with diverse membership and included student-nominated faculty members. New and innovative mentoring strategies, like the PODs model, will help create a scholarly environment that is conducive to personal

and professional growth while decreasing attrition and ameliorating the negative aspects of achieving one's doctorate.

Implementation Recommendations

The PODs mentorship model is an inexpensive and non-resource intensive program that facilitates informal mentoring in a PhD program. Based upon our experience of developing, implementing and evaluating PODs, we have five recommendations for Schools of Nursing to consider when implementing a similar model. Table 5 lists those recommendations.

Future Research

PODs attendees valued the face-to-face interaction with other students and faculty in a casual environment; however, no group met synchronously via the Internet. Due to the increase in distance-based learning programs and the challenge in scheduling in-person meetings, future research could examine the feasibility of a PODs program for distance-based PhD students. Specifically, face-to-face meetings could be replicated with synchronous Internet environments (e.g., Skype, Zoom, etc.) to foster mentoring among PhD students and faculty.

Limitations

There are several limitations for the first year implementation and evaluation of the PODs model. First, the amount of informal mentoring this model provided varied due to scheduling and life conflicts. Second, the survey response rate was less than 100%. Third, PODs group faculty members were not surveyed, primarily because the small sample size (n = 5) of faculty members would place these members at risk for providing identifiable data. Additionally, we did not examine the perspectives of faculty who did not participate in PODs. Therefore, we do not know how the PODs faculty members felt about their roles, how faculty who were not chosen to serve as mentors felt about the PODs program, or if PODs faculty felt conflicted during conversations in which students shared opinions about the program or working in academia. Finally, without individual identifiers we could not follow-up to encourage timely survey responses, link survey respondent's pre- and post-data, and describe findings by any key demographic characteristics. This information would be very useful in determining moderating influences of PODS. Due to the small size of our PhD program and the desire to maintain anonymity, we decided that the loss of this identifying data was outweighed by the potential benefit of the PODs model and obtaining input both prior to and after the first year's implementation.

Conclusion

Informal peer mentorship plays a critical role in socializing PhD students as they progress through the program and transition into life as a nurse scholar after graduation. Interactions with faculty and peers enables students to work through personal and professional issues in a community that is collaborative and supportive. The PODs peer mentorship model is a successful example that could be useful in other PhD programs to further enhance mentorship and create a supportive environment that promotes student success.

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References

American Association of Colleges of Nursing. Faculty Shortages in Baccalaureate and Graduate Nursing Programs: Scope of the Problem and Strategies for Expanding the Supply. 2005. Retrieved from http://www.aacn.nche.edu/publications/white-papers/facultyshortage.pdf

American Association of Colleges of Nursing. The Research-Focused Doctoral Program in Nursing: Pathways to Excellence. 2010. Retrieved from http://www.aacn.nche.edu/education-resources/PhDPosition.pdf

American Association of Colleges of Nursing. Fact Sheet: Nursing Shortage. 2014. Retrieved from http://www.aacn.nche.edu/media-relations/NrsgShortageFS.pdf

American Association of Colleges of Nursing. Nursing Faculty Shortage Fact Sheet. 2015. Retrieved from http://www.aacn.nche.edu/media-relations/FacultyShortageFS.pdf

Armstrong DK, McCurry M, Dluhy NM. Facilitating the Transition of Nurse Clinician to Nurse Scientist: Significance of Entry PhD Courses. Journal of Professional Nursing. 2016; doi: 10.1016/j.profnurs.2016.06.005

Cohen SM. Doctoral persistence and doctoral program completion among nurses. Nursing Forum. 2011; 46(2):64–70. DOI: 10.1111/j.1744-6198.2011.00212.x [PubMed: 21517879]

Fang D, Bednash GD, Arietti R. Identifying Barriers and Facilitators to Nurse Faculty Careers for PhD Nursing Students. Journal of Professional Nursing. 2016; 32(3):193–201. DOI: 10.1016/j.profnurs.2015.10.001 [PubMed: 27216127]

Gill P, Burnard P. The student-supervisor relationship in the phD/Doctoral process. British Journal of Nursing. 2008; 17(10):668–671. DOI: 10.12968/bjon.2008.17.10.29484 [PubMed: 18563010]

Goodfellow LM. Professional socialization of students enrolled in an online doctor of philosophy program in nursing. Journal of Nursing Education. 2014; 53(10):595–599. DOI: 10.3928/01484834-20140922-06 [PubMed: 25275993]

Corp, IBM. IBM SPSS Statistics for Windows (Version 23.0). Armonk, NY, USA: IBM Corp; 2015.

Institute of Medicine. The Future of Nursing: Leading Change, Advancing Health. 2011.

Macaulay W, Mellman LA, Quest DO, Nichols GL, Haddad J Jr, Puchner PJ. The advisory dean program: a personalized approach to academic and career advising for medical students. Academic Medicine. 2007; 82(7):718–722. DOI: 10.1097/ACM.0b013e3180674af2 [PubMed: 17595575]

Murr AH, Miller C, Papadakis M. Mentorship through advisory colleges. Academic Medicine. 2002; 77(11):1172–1173. [PubMed: 12431954]

National Research Council (US) and Institute of Medicine (US) Committee on Opportunities to Address Clinical Research Workforce Diversity Needs for 2010. Status and Future Role of Academic Nursing in Clinical Research. In: Hahm, J., Ommaya, A., editors. Opportunities to Address Clinical Research Workforce Diversity Needs for 2010. Washington DC: National Academies Press (US); 2006. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK20277/

Nehls N, Barber G, Rice E. Pathways to the PhD in Nursing: An Analysis of Similarities and Differences. Journal of Professional Nursing. 2016; 32(3):163–172. DOI: 10.1016/j.profnurs.2015.04.006 [PubMed: 27216124]

Pancheri K, Fowler DL, Wiggs CM, Schultz R, Lewis P, Nurse R. Fostering completion of the doctor of philosophy degree through scholarly collegial support. Journal of Continuing Education in Nursing. 2013; 44(7):309–312. DOI: 10.3928/00220124-20130515-38 [PubMed: 23713437]

Puckett AC Jr, Graham DG, Pounds LA, Nash FT. The Duke University program for integrating ethics and human values into medical education. Academic Medicine. 1989; 64(5):231–235. [PubMed: 2712999]

Qualtrics. Qualtrics (Version 07/2015). Provo, Utah, USA: 2015.

Sastre EA, Burke EE, Silverstein E, Kupperman A, Rymer JA, Davidson MA, Fleming AE. Improvements in medical school wellness and career counseling: A comparison of one-on-one advising to an Advisory College Program. Medical Teacher. 2010; 32(10):e429–435. DOI: 10.3109/0142159x.2010.498486 [PubMed: 20854149]

Sawatzky JA, Enns CL. A mentoring needs assessment: validating mentorship in nursing education. Journal of Professional Nursing. 2009; 25(3):145–150. DOI: 10.1016/j.profnurs.2009.01.003 [PubMed: 19450785]

Smith DG Jr, Delmore B. Three key components to successfully completing a nursing doctoral program. Journal of Continuing Education in Nursing. 2007; 38(2):76–82. [PubMed: 17402379]

Swan-Sein A, Mellman L, Balmer DF, Richards BF. Sustaining an advisory dean program through continuous improvement and evaluation. Academic Medicine. 2012; 87(4):523–528. DOI: 10.1097/ACM.0b013e318248565c [PubMed: 22361787]

Highlights

- PODs socializes PhD students into current and future roles as nursing scholars
- Informal mentoring may complement the traditional, formal PhD mentoring
- Students reported the cross-cohort, informal peer mentorship as beneficial and useful
- Peer mentorship with the support of faculty may enhance the student experience

Table 1

Pre- and post-implementation Qualtrics survey questions.

Pre- implementation	Post- implementation
1. I will benefit from participating in PODs.	1. I believe I benefitted from participating in the PODs program.
2. My peers will benefit from me participating in PODs.	2. I believe my peers benefitted from my participation in the PODs program.
3. Participating in PODs will be a good use of my time.	3. I believe participating in the PODs meetings was a good use of my time.
4. What do you most look forward to about PODs?	4. Please explain any benefits you personally received by participating in PODs.
5. What do you least look forward to about PODs?	5. Please explain what you did not like about participating in the PODs program.
	6. Please provide any suggestions you have about how we should change the PODs program.

Table 2

PODs Attendance

Month	PODs Group					Total**
	POD 1	***POD 2***	***POD 3***	***POD 4***	***POD 5***	
Sept	8/8 100%	8/8 100%	8/8 100%	7/8 88%	6/8 75%	37/40 93%
Oct	8/8 100%	6/8 75%	6/8 75%	7/8 88%	6/7 86%	33/39 85%
Nov	5/8 63%	3/8 38%	5/8 63%	6/8 75%	6/7 86%	25/39 64%
Dec	***	6/8 75%	***	***	***	6/8 75%
Jan	6/8 75%	****	6/8 75%	6/8 75%	***	18/24 75%
Feb	5/8 63%	7/8 88%	5/8 62%	*****	7/7 100%	24/31 77%
March	5/8 63%	6/8 75%	4/8 50%	****	******	15/24 63%
April	4/8 50%	7/8 88%	******	6/8 75%	6/7 86%	23/31 74%
Total *	7	7	6	5	5	76% *******

Note:

* Total number of times each PODs group met,

** number participants in attendance/number of participants in all PODs that held meetings each month,

*** No meeting due to holiday schedule,

**** No meeting due to snow storm,

***** No meeting due to student facilitator and faculty member not being able to attend,

****** No meeting due to scheduling conflicts,

******* Average attendance across all PODs.

Table 3

Pre- and post-assessment scale items and descriptive statistics.

	Frequency Counts					Mean
	1	**2**	**3**	**4**	**5**	**(SD)**
Pre Survey Items (n = 26)						
I believe I will benefit from participating in the PODs program	0	2	6	13	5	3.8 (0.85)
I believe my peers will benefit from my participation in the PODs program	0	0	6	16	4	3.9 (0.62)
I believe participating in the PODs meetings will be a good use of my time	1	2	6	15	2	3.6 (0.9)
Post Survey Items (n = 18)						
I believe I benefitted from participating in the PODs program	1	2	3	7	5	3.7 (1.2)
I believe my peers benefitted from my participation in the PODs program	0	1	6	7	5	3.8 (0.8)
I believe participating in the PODs meetings was a good use of my time	1	3	2	8	4	3.6 (1.2)

Note. All items used a 5-point Likert scale of strongly disagree = 1, disagree = 2, neither agree nor disagree = 3, agree = 4, strongly agree = 5. Median and mode were 4 for all questions for the pre- and post-implementation surveys.

TABLE 4

PODs Monthly Summary Topics

Topics	Sub-topic	Existing questions and concerns pre-PODs	Issues and concerns addressed in PODs
PhD program clarification	*Dissertation related-concerns*	• What study habits have you found successful? • How do I study for the preliminary exam? • How do I start my dissertation?	• Learning how students developed their research • Level of complexity and length of the dissertation • Preparation and explanation of the preliminary exam process; resources for preparing for the exam
	Scholarly student expectations	• How do I write a successful grant proposal? • How do I find elective classes?	• Student and faculty tips on writing fundable grants • Finding classes within the University and at other institutions; taking electives
Socialization to the researcher role		• Where do I find grants? • What professional organizations should I belong to? • How do I network?	• Suggestions of organizations which provide funding and which conferences one should attend • Networking skills
Surviving and thriving		• How do I manage my time? • How do I balance school, family, and my social life?	• Time-management • Study skills and strategies
Professional relationships		• How do I work with my mentor and mentors outside of the School of Nursing? • How do we determine authorship of abstracts and manuscripts?	• Student and faculty tips on working with faculty mentors • Disciplinary orientation of how authorship order is determined

Table 5

Summary Recommendations

Recommendation	Rationale
Schedule meetings as early as possible	PODs members can plan to attend the meetings and this will reduce schedule conflicts with other program activities.
Dedicate a specific day for PODs	A dedicated day (e.g., Third Wednesday of each month) will address scheduling challenges and may increase attendance.
Consider providing refreshments and/or snacks	This accommodation may promote a more casual environment and increase member enjoyment.
Encourage students to nominate PODs faculty	May help to promote engagement and participation in the program by students and faculty.
Protect PODs meetings as 'student-mentoring' time	Meetings should be student-driven and determined by members' current concerns, questions, and experiences.