Mentoring Doctoral Students for Qualitative Research: Interviews With Experienced Nursing Faculty in Japan

Mami Kayama, PhD, RN; Misuzu F. Gregg, PhD, RN; Kiyomi Asahara, PhD, RN; Noriko Yamamoto-Mitani, PhD, RN; Keiko Okuma, MSN, RN; Kikuko Ohta, PhD, RN; and Yasuhito Kinoshita, PhD

ABSTRACT

This study aimed to describe the process of mentoring doctoral students for qualitative research in Japanese graduate programs in nursing. Nine experienced faculty—seven nurse researchers and two sociologists—were interviewed. Participants were asked about their process of mentoring students for qualitative nursing dissertations. Data analysis was conducted using a qualitative descriptive method. Participants’ age ranged from 48 to 60 years. The first theme in the mentoring process is about the individualized, one-on-one mentorship process. The second theme occurs in a group process. The third theme is coordinating mentors and establishing a network to support the evaluation system. The mentoring processes identified in this study will be useful for future faculty development. The study elucidated much room for improvement in doctoral education programs for qualitative research methods in nursing science. [J Nurs Educ. 2013;52(5):283-289.]

Qualitative research methods are indispensable for scholarly activities in nursing science. The nursing sciences particularly emphasize human experiences and the interpretation of human interactions (Pope & Mays, 2006). Qualitative research methods are also an important component in a mixed-methods approach, wherein the researcher bases his or her inquiry on the assumption that collecting diverse types of data best provides an understanding of a particular research problem (Creswell, 2002). Nursing doctoral students who aspire to become full-fledged researchers in nursing are expected to learn how to conduct qualitative research and to learn how to discover new perspectives or unique interpretations of qualitative data. Faculty who mentor such doctoral students are required to have skills to teach effective ways of conducting qualitative research.

Mentorship is an important strategy for education. Roche (1979) investigated 1,250 executives and found that nearly two thirds of the respondents had a mentor, that the number of such relationships is growing, and that those who have had mentors earn more money at a younger age and are happier with their career progress. In a review by Davidhizar (1988), the mentoring concept was shown to have emerged as a popular concept in nursing as well. She insisted on the need and importance of mentoring in doctoral nursing education and explained its components: having forward-mindedness, common interest, advice and strategies, self-exposure, affirmation, and the awareness that mentees will be mentors. The National League for Nursing (2006) advocates the use of mentoring as a primary strategy to establish healthful work environments and facilitate the ongoing career development of nursing faculty. Zipp, Cahill, and Clark (2009) pointed out that the mentoring process is needed to ensure the scholarly development of doctoral students. The study’s researchers surveyed 100 faculty about their perception of the role of collaboration in scholarship activities. They found that the collaborative interplay between mentor and mentee fostered research productivity and positively impacted the production of new knowledge, serving a scholarship purpose for both the mentor and mentee.

On the other hand, few studies have been conducted in Japan to describe what occurs between mentors and students. Cultural
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characteristics in Japan may result in different approaches to mentoring, and there is a need to clarify how to provide mentorship for Japanese doctoral students to help them write good qualitative dissertations. Such study will shed light on what is essential in terms of educating students about qualitative research methods. The results of the study will therefore contribute to the development of faculty both in Japan and elsewhere who can effectively mentor doctoral students for qualitative research.

**Purpos**

The current study aimed to describe university faculty members’ skills in mentoring nursing doctoral students for their qualitative research dissertations in Japan. We conducted individual interviews with Japanese university faculty members who have significant experience in mentoring doctoral students.

**Background**

The scale of Japanese graduate education in nursing has recently undergone rapid expansion. The number of doctoral programs in nursing was 14 in 2000 but has increased to as many as 65 programs in 2012 (Japan Nursing Association, 2012). The shortage of doctorally prepared faculty in nursing in the United States has been described (American Association of Colleges of Nursing, 2005), but the problem is even more serious in Japan due to the lack of history of doctoral education until recently. The rapid increase of doctoral programs has not been matched by a similar increase in experienced faculty members.

Japanese graduate schools in nursing have mainly taught quantitative research methods; educational support for qualitative research methods has been inadequate. Of 80 programs leading to a master’s degree in Nursing Science in Japan (Japan Association of Nursing Programs in Universities, 2006), only 36 offer research methodology courses and only 35 offer classes that are specific to qualitative research. Among the 35 programs, 21 offer less than 8 hours of lectures and seminars (Okuma & Ambo, 2009). The need exists to facilitate better understanding of qualitative research for doctoral nursing students, such as by inviting qualitative research specialists to be part of dissertation committees (Kayama, 2009). The lack of expertise in qualitative research among the majority of nursing faculty members suggests the need for more effective education. In the case of graduate schools, which have faculty members with specialties in basic medical research, most dissertation committees do not prepare for mentoring or evaluating qualitative nursing research dissertations. In such contexts, dissertation committees would benefit from the participation of members with expertise in qualitative research.

**Method**

Design

A qualitative research design was used to describe the process of mentoring nursing doctoral students in Japan for their qualitative research dissertation.

Research Participants

Participants were nine university professors who work regularly as advisors for doctoral students at eight graduate programs in Japan. Selection criteria included currently mentoring one or more doctoral students pursuing a dissertation using a qualitative research design, and having experiences of serving as chair or member of a dissertation committee for at least three students who used qualitative research. Seven participants were nurse researchers and two were sociologists.

Interview Procedure

After we confirmed that the prospective participants met the inclusion criteria, we explained the purpose and the procedure of the study and invited questions. Participants were told they could withdraw from the study at any time. Ethical approval was given by the institutional review board.

Participants were asked to talk about coursework related to qualitative research methods, the research mentoring process, and the evaluation process of dissertation research using the qualitative method. Interviews were conducted at the participants’ offices, lasted for approximately 90 minutes, and were digitally recorded.

One semistructured interview was conducted for each participant. To facilitate the retrieval of detailed information about the mentoring process, a list of criteria to evaluate the dissertation mentoring process was used. This list was developed in a former study by one of the authors (Kayama, 2009), in which essential criteria were enumerated according to the timeline of the dissertation research and writing process. Following this timeline sequence, investigators asked research participants to recall the mentoring process in detail.

Data Analysis

Data analysis was conducted using a qualitative descriptive method (Gregg, Asahara, & Yokoyama, 2011; Miles & Huberman, 1994). After carefully reading the transcripts of the digitally recorded interviews, we extracted several mentoring focus points from the actual mentoring process, along with their detailed contents. Concrete ways of mentoring were listed according to the timeline of the doctoral program. At this stage of analysis, we did not attempt conceptualization of the extracted data; rather, we maintained the contexts and actual words used by the participants. Second, we examined all extracted data and compared them to identify similar content areas based on the timeline of the doctoral program. Third, we drew a figure showing the overall mentoring themes, reflecting the results from all nine participants. We then named each content area, denoting the mentoring skills involved. We carefully discussed whether the names accurately reflected the skills observed in data. On the basis of this discussion, one of the researchers (N.Y.-M.) compiled another figure to describe the overall skills used in the mentoring process. Other researchers examined all transcriptions, checking again whether the identified skills fit the interview data.

**Results**

Participant Characteristics

A total of nine experienced faculty from eight graduate schools in Japan participated in the interviews. The partici-
pants’ ages ranged from 48 to 60 years. The average time since the participants completed their own doctorates was 17 years. Five participants attended public graduate schools and four attended private schools. Seven participants mainly teach nursing, and two teach sociology but also mentor nursing students. The average number of graduate mentors who had undertaken dissertation research using a qualitative method was 6.8 (range = 0 to 20) as chairperson and 6.8 (range = 0 to 13) as a committee member. The Table displays the research participants’ characteristics and stories about their mentoring experiences.

### Three Themes of the Mentoring Process

Through the interviews, the outlines of skills used in mentoring were elucidated. The skills focused on promoting the students’ scholarly development process. The skills were categorized into three themes of the mentoring process. Each mentor had their unique stories of mentoring. We found universal themes from these stories. The first stream was related to the individualized process of qualitative research—one-on-one mentorship. The second stream involved the collaborative process—facilitating group work as a mentor. The third stream concerned networking, including ensuring access to coadvisors as resources and using the dissertation review committee as another resource. The Table shows three themes of mentoring process and set of skills of each stream.

### Individualized Process of Qualitative Research: One-on-One Mentorships

Strengthening knowledge of qualitative research methods is among the first themes of the mentoring process. The graduate school curricula for both master’s and doctoral nursing programs in Japan offer limited content related to qualitative research methods. Therefore, it is important for student advisors to first assess the students’ background in terms of their understanding and knowledge of qualitative research methods. In the case where a student intends to complete the master’s and doctoral programs consecutively, the advisor would be able to start the training for qualitative research at the master’s level. However, it is rare for students to be able to receive such integrated training, and so it is necessary for the advisors to assess the student’s preparedness in terms of data collection, analysis, and conceptualization. One participant reported:

We don’t have universal basic coursework for the qualitative method. We have seminars in each clinical area. I use my seminars to offer methodological coursework. Many doctoral

<table>
<thead>
<tr>
<th>Participant</th>
<th>Specialty</th>
<th>Years</th>
<th>Reported Mentoring Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Psychiatric nursing</td>
<td>12</td>
<td>Assesses the current status of student’s knowledge about research methodology and level of commitment to the research theme. Strengthens commitment through a one-on-one process. Ensures students can understand their analysis sufficiently well to present it in the peer group.</td>
</tr>
<tr>
<td>2</td>
<td>Adult nursing</td>
<td>17</td>
<td>Works with specialists in methodology as coadvisers throughout the mentoring process. Helps students to identify phenomena from a clinical context. Believes students can benefit from diversified viewpoints from peer group discussion.</td>
</tr>
<tr>
<td>3</td>
<td>Gerontological nursing</td>
<td>7</td>
<td>Facilitates conceptualization through a one-on-one process. Encourages students to extract concepts supported by data. Believes peer groups force students to present their ideas cogently to others.</td>
</tr>
<tr>
<td>4</td>
<td>Nursing education</td>
<td>13</td>
<td>Recommends continuity of study from the master’s level through the doctoral level. Believes students mentor each other through peer group. Supports integration through the one-on-one relationship. Also seeks help from coadvisors with regard to integration.</td>
</tr>
<tr>
<td>5</td>
<td>Nursing education</td>
<td>10</td>
<td>Emphasizes using group dynamics. Uses peer group seminars to help students learn research methodology. Believes students with various backgrounds positively influence one another.</td>
</tr>
<tr>
<td>6</td>
<td>Public health</td>
<td>27</td>
<td>Trains students to be social investigators on the basis of social investigation methods.</td>
</tr>
<tr>
<td>7</td>
<td>Community nursing</td>
<td>14</td>
<td>Believes peer groups are an opportunity to improve data analysis. Provides comments to break through preexisting frameworks. Suggests new viewpoints to capture the essence of actual phenomena.</td>
</tr>
<tr>
<td>8</td>
<td>Sociology</td>
<td>27</td>
<td>Believes the quality of the dissertation is improved during the course of five meetings with the evaluation committee. Committee comments foster the student’s socialization process. Incorporates evaluation process into mentoring process. Increases number of evaluation committee members from three at preexamination to five at final examination.</td>
</tr>
<tr>
<td>9</td>
<td>Community nursing</td>
<td>25</td>
<td>Takes advantage of outside methodological specialists. Uses a multiple advisor system.</td>
</tr>
</tbody>
</table>
MENTORING DOCTORAL STUDENTS

students, including those from other clinical areas, come to these seminars.

Others said:

- A mentor should assess whether the student has a sufficient basis to be an expert in the qualitative research method. I consult a methodologist when making this assessment.
- If a doctoral student comes straight out of the master's course, they have a basis in methodology from their coursework in the master's course. We also have older students who came to the doctoral course long after finishing their master's degree. They are removed from up-to-date knowledge about qualitative methodology. The level of preparation varies.

Depending on the level of knowledge and skills related to qualitative research, the participants reported that they recommend students read books on research methods, in addition to well-written research articles using qualitative methods.

Encouraging students to make data collection more research question-oriented is part of the individual interaction process. Advisors placed importance on developing interview guides, requiring students to conduct pilot interviews and to subsequently modify the guide. Sometimes students required participant observation in the field as a step in developing the interview guide. After the initial data collection, advisors read the transcripts with the students. They closely examine the data quality together. Advisors provide feedback to students regarding the clarity and precision of the data and encourage them to extract codes or categories to bring out the strength and importance of the data. At the beginning of analysis, students can generally verbalize the importance of their discoveries but are unable to write about it precisely. Advisors take time for students to talk freely about their discoveries and, in doing so, encourage them to express themselves logically and with a clear connection to the reality observed.

One participant stated:

After data collection, at the first meeting with the doctoral student, I ask them: "How was the story? What kind of story did the patient tell? Tell me everything." Sometimes the story is long. But telling it to someone like me who doesn’t know anything about the situation is effective in moving forward the student’s conceptualization of the data.

Another participant said:

My interest in data is reality. If I can feel reality from the data, if there is an intuition there, that’s what is important.

The purpose of facilitating students’ efforts to extract concepts that fit real phenomena is to improve the data quality. After data collection, the advisors require students to talk about their experiences in the field using their own words, without referring directly to data. This reporting includes the student’s essential point of view. Advisors then read the data together with students. Sometimes the naming of categories or concepts relies on predetermined typologies and does not necessarily reflect real phenomena. Advisors try to break down such preconceived categories and concepts so students can come up with codes that reflect the data and the participants’ experiences more closely.

Students’ ways of thinking are often heavily influenced by articles, textbooks, and well-known theories they have already learned. In a doctoral dissertation, originality is a top priority. Advisors try to teach students how to create concepts from both logical thinking and sensitivity to the data. After naming the concepts, students are required to explain what is original about them.

One participant noted:

I advise students to have a central core image that they want to express. Then they should choose the name of the coding. Properties and dimensions are also important, but so is making sure that the coding fits the phenomenon. If they decide
Collaborative Process: Facilitating Group Work as a Mentor. Clarifying research questions through the use of group activities aims to take full advantage of the unique potential of groups. Advisors who participated in this study were assisting up to six doctoral students at the same time. They organized weekly or monthly group seminars. Doctoral students are required to make presentations at these seminars. This kind of arrangement allows multiple doctoral students to interact with one another and ask questions about one another’s research from different standpoints. This usually serves to clarify the students’ research questions. If, for example, there is a student who did not know about another student’s target phenomenon, the seminar provides a good opportunity to explain the phenomenon in detail. Such interactions within students’ groups force members to make their research questions more tangible. This type of interaction also occurs between advisor and student, but discussion in a peer group tends to be broader. Members compare their questions with one another, which helps them to be conscious about the differences. The discussion process is useful in helping students to take advantage of opportunities for self-expression. It helps them to get used to being challenged by others. The discipline of having to express the content of their research in a way that is intelligible to others also readies them to defend their research in front of multiple advisors. It serves to help students learn to convey their findings more persuasively to others and helps them to strive to be understood.

Advisors made use of this group dynamism consciously. For example, one participant said:

At the end of first year, doctoral students do their presentations based on their substruction. This is part of their routine coursework. After that, they come back to take part in seminars in each clinical area. There are several students in these seminars. Once a month, seminar participants make presentations and discuss each other’s work. This makes their research questions clearer. Various viewpoints come up in the group discussions.

Another participant mentioned:

During spring term, from April to July, students gain experience in the clinical setting in the process of this particular research. After their literature review, they give presentations at the weekly seminar for doctoral students. We have many clinical specialists in the group. They raise questions about issues, which aren’t easily explained in terms of the concepts the student has set out. Being challenged to show actual data to explain the issue helps the student to assess the direction of his or her data collection efforts.

Networking. Ensuring access to the resources of coadvisors concerns strategies related to organizational/system issues in the doctoral program. The main topic was the role of coadvisors and members of the dissertation committee. The number of committee members ranged from four to six. Advisors might also be committee members, and one to three other professors might serve as core advisors. It was felt that advisors should have knowledge about the phenomenon in which the student is interested, as well as knowledge about appropriate methodology to study that phenomenon. In many cases, this requires the resources of coadvisors.

One participant stated:

I always ask specialists in qualitative methodology outside of the university to become coadvisors. Sometimes doctoral students also attend an outside specialist class held at another graduate school, if the instructor agrees to do so. I can’t cover every type of qualitative methodology.

Advisors were specialists in certain areas of nursing and sociology. Sometimes they had expertise in the particular phenomenon, the appropriate methodology, or both. Other coadvisors are often members of the dissertation evaluation committee. In such cases, students benefit from having another understanding member on the committee. Coadvisors often help students to synthesize their doctoral dissertation throughout the whole writing process.

In Japan, generally few faculty receive essential training in qualitative research methods. Evaluation committees are also still largely unfamiliar with such methods. For this reason, inviting methodological specialists to be on evaluation committees is important to ensure the fair evaluation of qualitative dissertations.

Effectively using the dissertation review committee as a resource involves the process of synthesizing and socializing the student’s analysis. Dissertation defenses are first vetted by the advisor and core coadvisors, with respect to the dissertation draft. Their goal is to examine whether the draft surpasses the standards of a doctoral dissertation. A chief judging criterion is whether the dissertation offers new knowledge, including new frames of reference. If the examiners can agree that the dissertation surpasses dissertation standards, a review committee is organized chiefly by the advisor, taking into account the opinion of the student.

The standard number of review committee meetings varied among participants. One participant reported that in a sociology course, one drafting committee and four review committee meetings were held. In nursing courses, one drafting committee and one defense, either closed or public, was the average.

The review committee typically includes specialists in both methodology and in the phenomenon being studied. Students make a presentation to the committee and receive comments from the reviewers. They can then present their findings to other people. This is the socializing process of the findings. Because the members of the review committee work in an academic community, they have a sense of how the outcome of the research may be useful for the field of nursing.

Students and advisors sometimes develop long-term relationships during the process of supervision. However, a form of tunnel vision may also result from this. For example, the student and advisor can understand each other fairly well, but other reviewers may find it harder to understand the context in which the student is operating. Doctoral dissertations should be written for a broad audience. The process of socialization during the reviewing and rewriting process can therefore broaden the student’s vision and bring it closer in line with reality.

One participant stated:

At the preliminary examination, we examine the draft of the dissertation. There are three members on this committee. One
is the mentor; two are from graduate schools in fields that relate to the theme. Members of this committee advise doctoral students on how to revise their papers. After revision, the committee decides whether the dissertation can move ahead to final evaluation. The biggest issue for the evaluation committee is the structure of the dissertation as a whole. Structure means the appropriateness of the research questions and the findings. This step in the committee’s process results in big progress for the dissertation. Even students themselves are surprised at how much progress is made.

Another participant said:

We need comments from the viewpoint of outsiders other than the mentor and student alone. I request multiple mentorships as a committee member. This helps me feel more secure as a mentor.

In a one-on-one relationship with the mentor, the student can explain concepts and phenomena by drawing on the past history of the relationship, but in many cases such explanations are inadequate and remain opaque to coadvisors. Learning to verbalize and express ideas more cogently to coadvisors can serve as good practice for presenting research results to fellow researchers in the same field of study.

DISCUSSION

The Evolution of Mentoring in Japan

Mentoring in Japan is evolving from a one-on-one relationship to a collaborative process. Nursing doctoral programs in Japan are taking steps to strengthen their coursework offerings in qualitative research methodology. However, the level of knowledge about such methodology currently varies considerably from mentor to mentor, as well as from student to student. Given this reality, the one-on-one student–mentor relationship, because it is individualized, is a particularly appropriate process through which to shore up each student’s knowledge of the research methods and focus the research questions.

In Japan, the traditional one-on-one mentor–student relationship continues until the student’s doctoral dissertation is completed. Mentors and students spend much time together and, consequently, reach a stage wherein they can understand one another without the use of many words, much like a mother and child. Japanese culture places high value on this kind of tacit understanding, in which two people can mutually infer meaning on the basis of a common background and shared assumptions. Haugh (2003) pointed out that this kind of nonverbal communication style, referred to in Japanese as ishin-denshin (expressing from heart to heart), often makes it difficult for Japanese people to communicate with foreigners.

However, the process of becoming a member of the academic community, starting with the doctoral defense and presenting papers at academic conferences, necessitates the ability to express thoughts explicitly and cogently to gain the understanding of a broad audience.

In our study, mentors sought to assure the quality of the mentoring process by taking advantage of group dynamics. Group approaches are effective in enriching the quality and expanding the quantity of doctoral education. Llechty, Schull, and Liao (2009) indicated that social support from peers is critical to doctoral students’ success. The mentoring process, in seeking to clarify research questions through group activities, also serves to facilitate social support from peers. This method is especially suitable to doctoral students who are members of an academic community. The experienced mentors studied first prepare students’ basic knowledge and competency for data analysis. Then, they test the students’ consistency with regard to the research question through the effective use of group dynamics.

Advisors in this study began the mentoring process as an individual, one-on-one relationship, but it progressed toward a collaborative and then a group approach and networking process.

Noonan, Ballinger, and Black (2007) conducted three focus groups of protégés, peer mentors, and faculty mentors involved in mentoring to explore the definitions of the mentoring process for doctoral dissertations. They divided the analysis process into independent and collaborative themes. They identified professional socialization and opportunity as particular mentor behaviors. These behaviors were related to what we have termed “facilitating group work as a mentor” and “working effectively with the dissertation review committee” in our study. The behaviors involve the process of synthesizing and socializing the student’s analysis.

Grossman (2007) pointed out that the mentoring process is evolving from a hierarchical to a more collaborative process. She also stated that in today’s world, it seems only sensible that mentoring will evolve from a one-on-one relationship to a network with the overwhelming focus on team effort.

Cultivating Doctoral Mentors: Developing Faculty Who Can Build Collaborative Interactions With Doctoral Students

The fact that there is insufficient time for doctoral students in Japan to learn qualitative study methods reflects a general shortage of faculty members who can teach a qualitative research course in a single program. Given these limitations, dissertation advisors tend to seek out multiple coadvisors for their dissertation students. This approach is important not only in terms of successful completion of the dissertation but also in terms of creating networks for the future research of doctoral students. Records and Emerson (2003) stated that the development of appropriate networks is a key for the success of research programs in mentoring for research skill development. Most doctoral students become faculty members after they complete the doctoral program. If they have learned how to work with multiple advisors in their own dissertation process, they can create a similar environment for their students and for themselves to facilitate future research.

Advisors in this study also sought to assure the quality of the mentoring process by ensuring students’ access to the resources of multiple coadvisors.

Currently, faculty members are following their own original approaches to mentoring. There are few opportunities to learn about the mentoring process from others. A recent survey of doctoral nursing programs in Japan pointed out the problem of insufficient faculty development, reflecting the lack of accumulated experience in doctoral programs (Miki, Gregg, Arimoto, Nagata, & Murashima, 2011). A prior report on the future of
graduate education emphasized the necessity of clarifying the educational process leading to a doctoral degree. Only a relatively small number of faculty have been formally prepared for the role of nurse educator. Together, these factors point to the need for more adequate preparation of and support for faculty as mentors so they can, in turn, contribute to the development of competent professionals in nursing among their students (Davidhizar, 1988).

One limitation of this study was the small number of participants due to the limited numbers of expert mentors in qualitative research in Japan. On the other hand, this study ultimately represents an almost-complete census of all Japanese expert doctoral mentors in nursing. The study will prove informative not only for new faculty but also for experienced faculty, helping them to better understand the significance of their own mentoring process. It would be worthwhile to further explore their role as doctoral mentors, as well as the correlations between the expressed needs of doctoral students and the mentors’ actions, by including data gathered from students. Finally, given the increasing cultural diversity in the world, it would be useful to investigate the impact of culture on mentorship for international mentoring.

CONCLUSION

This study described the process of mentoring nursing doctoral students for their qualitative research dissertations, as reported by experienced mentors. Mentoring such dissertations is a critical element in building a basic educational foundation for qualitative nursing research. At the same time, the study highlighted the importance of greater understanding of qualitative research methods on the part of evaluation committee members in terms of ensuring a fair evaluation of such dissertations. The need for a mechanism to raise awareness of qualitative research methods was also suggested. The study also shed light on some options available for mentoring, namely the use of group process and multiple coadvisors as resources within the academic community. The process of mentoring can ultimately lead to the cultivation of new mentors who are able to build and utilize their own networks as nurse researchers.

The mentoring process is influenced by the emphasis on one-on-one relationships in Japanese culture. Given this context, the use of group process and networking to expand on the individualized process is important while the doctoral student learns to build his or her own networks as a nursing researcher. Finally, given the increasing cultural diversity in the world, it would be useful to investigate the impact of culture on mentorship for international mentoring.

REFERENCES


